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# Designing identities for "green" industries

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**Designing identities for “green” industries**

by

**Beverly Lynn Krumm**

A thesis submitted to the graduate faculty  
in partial fulfillment of the requirements for the degree of  
**MASTER OF FINE ARTS**

Major: Graphic Design

Program of Study Committee:  
Roger Baer, Major Professor  
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Ames, Iowa

2011

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## **ABSTRACT**

There has been resurgence in the social significance of sustainability with the recent concerns of global warming, although sustainability is not a new idea. Environmental concerns began on a national level in 1970, but it is again a ‘hot’ topic, and businesses want the appearance of being ecologically friendly. It has become fashionable to be “green” or to give the appearance of being “green.”

A visual identity does more than represent a company, product, or service; they trigger emotions, create desires and forge communities. A logo is just one element of a corporate identity system, but it is arguably one of the most important. Successful logos share several qualities: they are distinct, they are decipherable at any size, they have the capacity to be used in color or black and white, they translate well across a broad range of media, and they hold the possibility for animation. Logos communicate a corporation’s visual identity on a qualitative level in order to improve the image of the company.

This thesis utilizes studies in Psychology, branding, and explorations of logos—both style and classification—to create a proposal for a standard process when designing “green” corporate identities.

The purpose of this study is to create a process for designers to use when creating visual identities for “green” industries. These identities should be unique and memorable without using cliché images or colors and which communicate the message of the product, service, or company. This study will examine the re-branding process and different methods of classifying trademarks and logos; such as style, material and referential qualities, and

motifs. Responsible analysis of present trademarks and logos will show that the most successful marks are those where careful research of the corporate identity was completed.

In most cases, the designer is working with a product that is not a concrete image, such as energy or electricity, or with images that are not aesthetic, such as biowaste. The results will show that to create a distinctive logo designers must look at the processes involved in the production of these commodities.

Fulcrum Bioenergy is a relatively new company (2008), which uses a thermochemical process to convert municipal solid waste (garbage) into cellulosic ethanol that is used in fuel for transportation vehicles. The name of the company, Fulcrum, originated in a brainstorming session, not exactly because of the process the waste goes through to be converted to ethanol, but because they see the biofuel industry as a pivot and their company as the “fulcrum” leveraging new technologies with the social and environmental benefits of using garbage to create ethanol. A fulcrum is something that supplies the capability for action and each step of the thermochemical process is viewed as a fulcrum. The triangular shapes of the symbol within the logo (Figure 1) have a dual meaning: they represent the shape of a fulcrum and reflect transformation (the symbol is an abstract butterfly).<sup>1</sup>



**Figure 1. Fulcrum BioEnergy logo**

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<sup>1</sup> Karen A. Bunton, representative of Fulcrum BioEnergy, Inc. email correspondence 26 April 2010.

## CHAPTER 1. INTRODUCTION

With the pressure of social responsibility for products and industries to be “green”, there has been an influx of “green” identities flooding the marketing world. Images of leaves, water droplets, and recycling arrows are icons that have been overused to create visual identities. It appears a company or product can instantly become environmentally friendly in the consumer’s mind by having the dominant color of the logo be green.

### 1.1 Overview of terms

There are many terms that will be used that need to be defined. *Identity* is defined by the 2011 edition of the Merriam-Webster dictionary as sameness of essential or generic character in different instances, sameness in all that constitutes the objective reality of a thing (oneness) and the distinguishing character or personality of an individual. The concept that identity is unique and consistent is the foundation of the definition of corporate identity, which has been defined as “an organization’s sense of self, much like our own individual sense of identity; consequently, it is unique.”<sup>2</sup> Identity is expressed in the names, symbols, logos, colors and rites of passage, which the organization uses to distinguish itself, its brands and its constituent companies.<sup>3</sup>

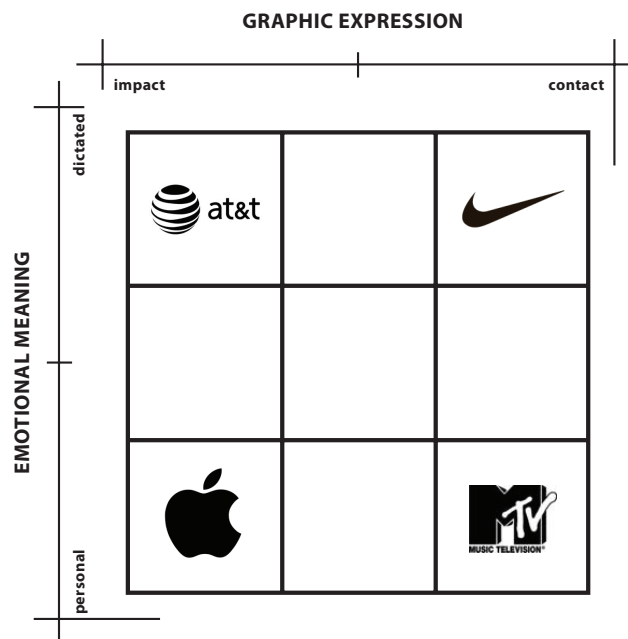
Corporate identity systems have evolved over time to reflect the changing business environment from an approach based on the concepts of visibility and impact to an approach based on the concept of emotional interaction with consumers. In the book, *Emotional*

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<sup>2</sup> Marieke de Mooij, *Consumer Behavior and Culture* (Thousand Oaks, CA: Sage Publications Inc, 2004), 111.

<sup>3</sup> Wally Olins, *Corporate Identity* (London: Thames and Hudson, 1989), 9.

*Branding*, by Marc Gobé, he states that we live in a consumer-driven economy where corporate identities are expanding the expression of their character and becoming more flexible and dynamic in order to bring levels of added significance to consumers' perceptions. More simply stated, corporate identities are transforming from a visual identity whose meaning was dictated to the consumer (brand awareness) to a visual identity whose context creates an emotional message that engages the consumer (emotional branding). As illustrated in Figure 2, dictated and impact identities, that 'tell' the consumer what values they represent, are more passive where the newer personal and contact identities, designed around emotion and can be interpreted differently from one consumer to the next, engage and connect the consumer to the corporation and better define the desired personality of the company.



**Figure 2. Brand evolution from dictated to personal and from impact to contact,<sup>4</sup>**

<sup>4</sup> Marc Gobé, *Emotional Branding* (New York: Allworth Press, 2001), 123.

In marketing, a visual identity is the character of a corporation, which is designed to be in accord with and to facilitate the attainment of business objectives. Knapp, Evans, and Cullen in their book, *Designing Corporate Identity: graphic design as a business strategy*, determined that these objectives are usually manifested visibly by way of branding and the use of logos. Per Mollerup agrees in his book, *Marks of Excellence*, with his definition of a design program as a plan that specifies the visual forms that the company will use to present itself and to control a company's visual identity. It is through the design program and the resulting visual identity that a company can inform people inside and outside of the organization of what, who and how it is, or how it wants to be. Likewise, Adams, Morioka, and Stone in their book, *Logo Design Workbook: A Hands-On Guide to Creating Logos*, define the identity of a company, person, object or idea as the combination of the visual system: logo, typeface, colors, imagery and editorial tone. It is the way these individual items work together to form a cohesive and unique message that forms an identity. This is where it can be confusing. Even though each of these words (logo, visual identity, corporate identity) has distinct definitions, they can be confused to mean the same thing.

The term “logo” is short for logotype, a trademark made from a custom-lettered word. Logos is Greek for word.<sup>5</sup> A trademark is a name or symbol used to indicate ownership or origin of goods.<sup>6</sup> Marty Neumeier states in his book, *The Brand Gap*, that the term “logo” caught on with designers and the public, and it became interchangeable with the term “trademark”, whether the trademark was a logo, symbol, monogram, emblem or another

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<sup>5</sup> Marty Neumeier, *The Brand Gap* (Berkeley, California: New Riders, 2006), 1.

<sup>6</sup> Sean Adams, Noreen Morioka, Terry Stone. *Logo Design Workbook: A Hands-On Guide to Creating Logos* (Beverly, Massachusetts: Rockport Publishers, 2004), 16.

graphic device. The logo is not the brand; it is merely a symbol for the brand. In addition, a brand is not a corporate identity system or a product. A corporate identity system is a construct for controlling the use of trademarks on company publications, advertisements, stationary, vehicles, signage, etc, a product is a tangible item with sales and distribution, while a brand is a kind of transcendent ideal, a concept shared by society to identify a specific class of things, an approximate, yet distinct, understanding of a product, service or company. In the book, *Branding: From Brief to Finished Solution*, Mono take a more business-like approach to the definition of branding as a tool, which brings familiarity and feelings of safety and loyalty to consumers. Branding is utilized to increase sales, but also communicates information clearly and efficiently for the benefit of the public.

In order to establish some clarity of terms for the remainder of this thesis, the author will use the term logo to represent the specific mark for what a company represents or hopes to represent, visual identity to represent the constructs of the logo, and corporate identity to represent the corporate name, colors, typefaces, etc. beyond the individual mark. A powerful logo is a visual representation of the meanings attached to the imagery and, thereby, influences consumers' reception of a company's or product's message. Gobé reasons that logos must evolve over time to reflect the changing social, cultural, and philosophical context.



## 1.2 Context

This author's interest in the identity design of "green" industries started when the decision was made to design a new identity for a small but international company that created heated air, heated fluids, steam and electricity from the internal combustion of biowaste. This local company was right on the verge of becoming a leader in biowaste renewable energy at a time when the demand for alternative energy was soaring.

Nature's Furnace was a new enough company, the first prototype built in 1994, that this author believed they should be receptive to designing an identity that reflected the innovative product they developed. Currently, their logo was composed of green recycling arrows inside of a circle that referenced the earth (Figure 3). There had to be something unique about the process used to create the renewable energy, which could be the source of inspiration for the concept behind a new logo to identify this company. A face-to-face meeting was arranged to interview the owner and CEO, John Kimberlin, and observe a demonstration of Nature's Furnace in action.



**Figure 3. Nature's Furnace current logo**

### 1.3 Problem

During the interview John Kimberlin stated his concern that he was not positive their present identity (logo) was really communicating to the public what they were really trying to accomplish with Nature's Furnace. He felt there was a lot of confusion with potential clients as to whom they were and what they did because they were using three different names to distinguish the three different units used to create the four different types of energy, yet they generically referred to all of the different units as Nature's Furnace. Nature's Marketing was added as the parent company to connect the three into one company. Nature's Marketing, alone, was ambiguous as to what it represented; it could be a market for natural foods. Kimberlin felt if the company was going to change its logo, the time to do it was now.<sup>7</sup> This changed the project from a company needing a logo that better represented what the company was about to a complete re-branding of the company's visual identity.

Jeff Fisher spells out the process a designer should follow to re-brand a company or product in his book, *Identity Crisis*. Successful re-branding projects require a great amount of collaboration between the designer and the client. The designer brings their knowledge and experience to the project along with good listening skills, flexibility and some humility, while clients should share everything possible about the business and be open to totally new, even unexpected ideas. Fisher adds that customers need to be re-educated on the reasons behind the identity changes to avoid confusion and distrust. Nature's Marketing client base was small enough and intimate enough, there would not be a problem reasoning the identity

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<sup>7</sup> John Kimberlin. Personal Interview. 23 October 2009.

changes to the clients as a group. It was the desire of bringing in new customers that fueled the new identity.

It appears there is a ‘brand gap’ between what the developers and marketing people for Nature’s Marketing understood their present identity is communicating to the public and what the public actually understand it to mean. A ‘brand gap’ is a rift between strategy and creativity—a company can be so divided from its customers that no significant communication passes between them.<sup>8</sup> Nature’s Marketing has a team of dealers and distributors who work hard to convey the message of biowaste as a renewable energy to potential clients, but they spend all of their energy searching for new clients. If the gap could be closed, clients could seek out the company. There are a variety of businesses that could see positive results by adding one of the three Nature’s Marketing units to their business that simply don’t know this specific technology exists.

The combustion of biowaste into a renewable fuel isn’t a new idea. Since the Industrial Revolution at the end of the 19<sup>th</sup> century, the government has subsidized projects that adapt existing technology to use biowaste as a fuel source.<sup>9</sup> Kimberlin’s biowaste renewable unit design is the result of a problem he had to solve. He had rented out his livestock confinement facility and when the lease ended, Kimberlin found himself the owner of a mountain of bedding and manure waste. There was too much biowaste to spread over his pasture without contaminating the ground and water table, and it was too costly to haul away. Before Kimberlin’s discovery, all research of biowaste renewable production was focused on

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<sup>8</sup> Marty Neumeier. *The Brand Gap* (Berkeley, CA: New Riders, 2006), 15.

<sup>9</sup> *Renewables in global energy supply: An IEA facts sheet* (International Energy Agency (2007), 7.

adapting biowaste to fit existing technologies, where Kimberlin solved the problem from a different viewpoint: by taking advantage of the insulating and bridging characteristics of biowaste when combusted internally. He found, surprisingly, the process to be very powerful and productive while virtually eliminating all odors, bacteria, parasites and weed seeds. His design was small, cost effective, able to produce energy in three forms, and with the addition of existing technology, electricity can also be produced.<sup>10</sup> It was the different viewpoint Kimberlin used to solve the problem that creates a unique and successful process.

Lisa Silver, the author of the book *Logo Design That Works*, considers reaching the target audience and reflecting the common heritage and aspirations of the company as the designer's biggest challenge in the development of a logo, while combating negative stereotypes or images associated with the current logo as the challenge in redesigning a current logo. In the case of "green industries" the designer is often working with products that are not concrete images, such as energy and electricity, and with images that are not aesthetic, such as biowaste. Some examples of logos that have been redesigned to combat negative stereotypes include the identity for Blackwater USA, a private security business, the Drake University D+ marketing campaign, and the Assault Care Center Extending Shelter and Support (ACCESS) logo. The Blackwater logo (Figure 4) was redesigned in 2007, after employees committed some serious abuses during the Iraq War, to give a softer, safer, more ambiguous, corporate tone instead of the tough, even menacing tone of the original logo (Figure 5). Drake University's "D+ The Drake Advantage" (Figure 6) did not last long after it first appeared on the university's admission site in 2010. Top Drake officials felt the

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<sup>10</sup> John Kimberlin. Personal Interview. 23 October 2009.

students they wanted to attract would appreciate the irony of the D+ message, “your potential + our opportunities”, but the negative association between the logo and the grade for nearly failing was too much to overcome and the logo was pulled for the traditional Drake University logo (Figure 7). The original Assault Care Center Extending Shelter and Support (ACCESS) logo (Figure 8) resembled a man’s penis; not appropriate for a center that helps victims of sexual assault and domestic violence. The current logo (Figure 9) is a heart inside of the outline of a house, which identifies with caring, helpful individuals and the safe environment of a shelter.



Figure 4. New Blackwater logo



Figure 5. Original Blackwater logo



Figure 6. Drake University D+ logo



Figure 7. Original Drake logo



Figure 8. Original ACCESS logo



Figure 9. Current ACCESS logo

## 1.4 “Green-washing” vs. “Green”

With the rising demand for increased sustainability, corporations advertise the “green” attributes of their products and services, which can be consciously or unconsciously deceptive in order to promote an environmentally friendly perception to the public. The term “green-washing” was coined by Jay Westerveld, a New York environmentalist, in a 1986 essay regarding the hotel industry’s practice of promoting guests reuse their towels as a way to help “save the environment” with little or no effort toward the implementation of waste recycling by these institutions.<sup>11</sup>

In an effort to reduce “green-washing,” the Federal Trade Commission (FTC) has published a guide that specifically addresses the FTC laws concerning the application of environmental advertising and marketing practices, including labeling, words, symbols, packaging, logos, and brand names. The guide is composed of general principles and specific guidelines, followed by examples to provide a basis for voluntary compliance. Section 5 of the FTC Act makes deceptive acts and practices in or affecting commerce unlawful. Reliable scientific evidence, tests, analyses, research, studies or other evidence based on the expertise of professionals in the relevant area are used to support the claims of environmental marketing.<sup>12</sup>

Since the early 1990s, the number of consumers with environmentally responsible attitudes has grown due to the international awareness of environmental problems, disasters

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<sup>11</sup> Purple Romero. *Beware of green marketing, warns Greenpeace exec*, ABS-CBNnews.com, accessed 26 March 2011, <http://www.abs-cbnnews.com/special-report/09/16/08/beware-green-marketing-warns-greenpeace-exec>

<sup>12</sup> *Guides for the Use of Environmental Marketing Claims*, Federal Trade Commission, accessed 12 June 2010, <http://www.ftc.gov/bcp/grnrule/guides980427.htm>

and protection activities. This group is driven by the largest demographic group in American history, the Baby Boomers, which represent nearly one-third of the US population.<sup>13</sup>

Jacquelyn Ottman, author of the book, *Green Marketing: Opportunity for Innovation*, defines the Baby Boomer generation as having deep-rooted values, which were established in their youth and have shaped their lifestyles and decisions. From health and fitness of the body to the health and fitness of the environment, their concerns are for a more holistic wellness that emphasizes overall quality of life, and this group of consumers is more willing to purchase products that follow this philosophy.

Due to the buying power of this group, companies were forced to change their behaviors in regard to compliance with society's environmental concerns. There is a new 'bottom line' in business these days: the triple bottom line—people, planet, profit—which represents a fundamental shift in the way businesses measure success. Sustainability is seen as the core promise of new brands and authenticity is critical.<sup>14</sup> Designers have an ethical obligation to live up to this promise.

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<sup>13</sup> Jacquelyn A. Ottman. *Green Marketing: Opportunity for Innovation* (Charleston, South Carolina: BookSurge LLC, 1998), 5-31.

<sup>14</sup> Alina Wheeler. *Designing Brand Identity* (Hoboken, New Jersey: John Wiley & Sons, 2009), 70.

## **1.5 Questions**

This research will focus on two basic questions:

1. Can a process be established for designers to use when creating visual identities for “green” industries, which are unique and memorable without using cliché images or colors?
2. Can these logos communicate the message of the product, service, or company to the consumer?



## CHAPTER 2. REVIEW OF LITERATURE

To create a new visual identity, a designer must consider the mission statement of the company or product and how this statement can be communicated to consumers. The designer must consider how colors and images are interpreted. To begin a branding or re-branding project, the designer must ask the client many questions about the company's vision and values, their brand and product and their target audience. Consumers often purchase products or services on their perceived value of a brand rather than its actual value. With the proper logo, a company, product or service can increase their perceived value, establish consumer relationships and nurture those relationships into consumer loyalty. Nature's Marketing is an international company, which adds the challenge of cross-cultural recognition of the logo.

This literature review will be divided up into several areas: consumer behavior and Psychology, branding and brands, trademark classification, and design ethics.

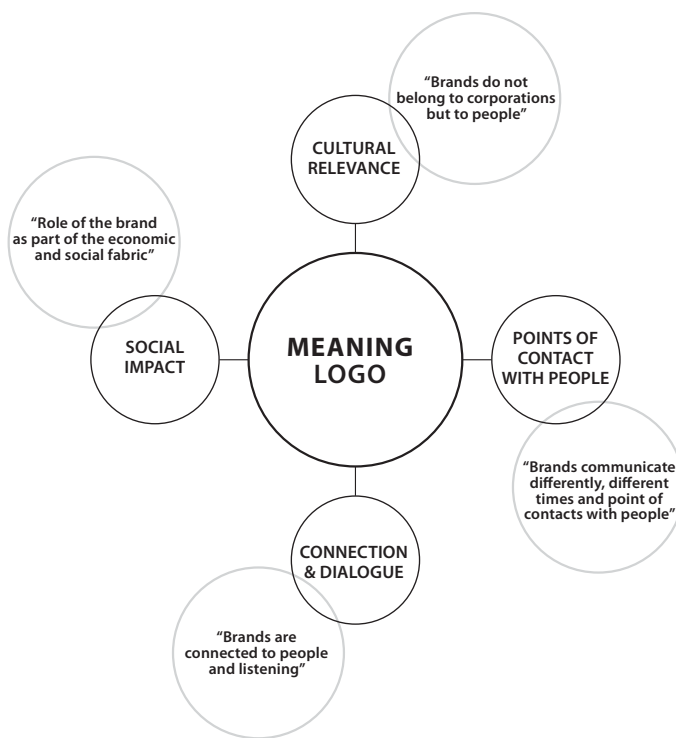
### 2.1 Consumer Behavior and Psychology

Marieke de Mooij has a PhD in communications and has focused her research and consultancy work on international consumer behavior and the need for increased competence in global marketing. In her book, *Consumer Behavior and Culture*, de Mooij discusses the uniqueness of a corporate identity and the impressions, images and personality that is projected by a corporation. While a brand may have a clearly defined image created by advertising, a corporate identity is not as concrete. De Mooij's research has found that there is a general agreement in American marketing that consumers tend to favor brands they

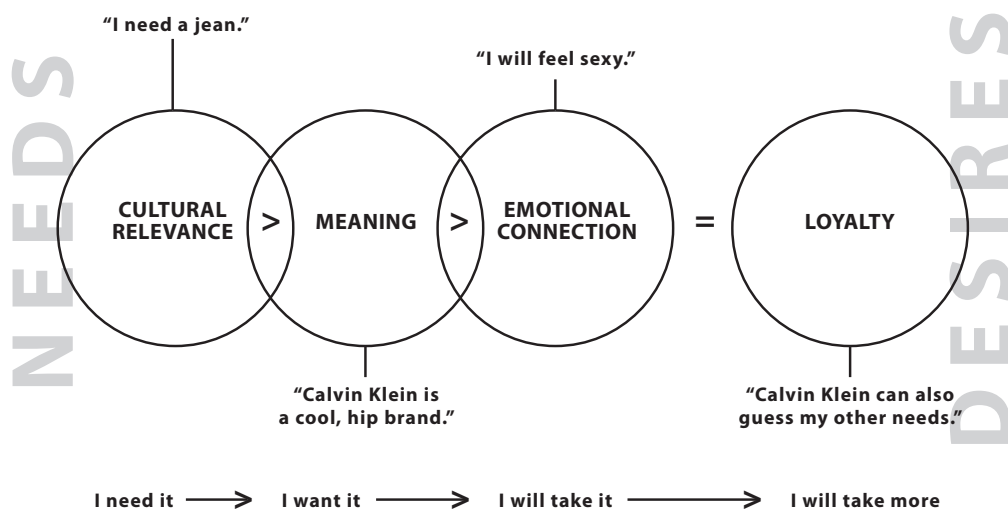
perceive as similar to themselves. There is the assumption in Western cultures that consumer's attitudes will lead them to behave in a fairly consistent way toward similar objects. Philip Kotler, the author of *Marketing Management*, concurs with de Mooij that there can be a consistent attitude toward a specific object in individualistic cultures. Consumer consumption of a product or service is one way this attitude can be measured. Consumer behavior can also be predicted from their attitudes toward specific products, services or brands.

De Mooij states that these conditions vary by culture. American (Western) cultures are individualistic and have fewer constraints on their behavior, so their perception of a brand or corporation better reflects their personal attitudes or values. In a collectivistic culture there is greater concern of situational demands, which means the more an individual sees himself as a member of a group, the weaker the connection to a product or corporation there.

Marc Gobé, in his book *Emotional Branding*, considers how logos serve as a cultural connection to consumers, instead of a mere physical marker, and that established logos must adapt in order to remain relevant (Figure 10). In a consumer-driven economy, corporate identities need to encompass the social and cultural context of human dynamics that encourages communication internally between employees and externally to consumers through a dialogue-based approach that encourages consumer contact and dialogue with the corporation. Corporate identities need to transform from a culture of need to one of desire based on the emotional connection the consumer has with the brand, company, or product (Figure 11).



**Figure 10. Corporate Identity Relationship Model (Cultural Connection)<sup>15</sup>**



**Figure 11. Corporate Identity Relationship Model (Emotion based)<sup>16</sup>**

<sup>15</sup> Marc Gobé, *Emotional Branding* (New York: Allworth Press, 2001), 139.

<sup>16</sup> Ibid., 144.

Emotions can be either conscious or unconscious, but each is the result of stimulations in the brain. Joseph LeDoux, author of *The Emotional Brain*, states that human emotions are unconsciously formed, evolutionary and genetically stamped within our brains. Designers know that a successful emotional connection to a product will result in a successful product. The success of Nature's Marketing is contingent on the successful emotional connection of the visual identity to consumers.

## 2.2 Branding and Brands

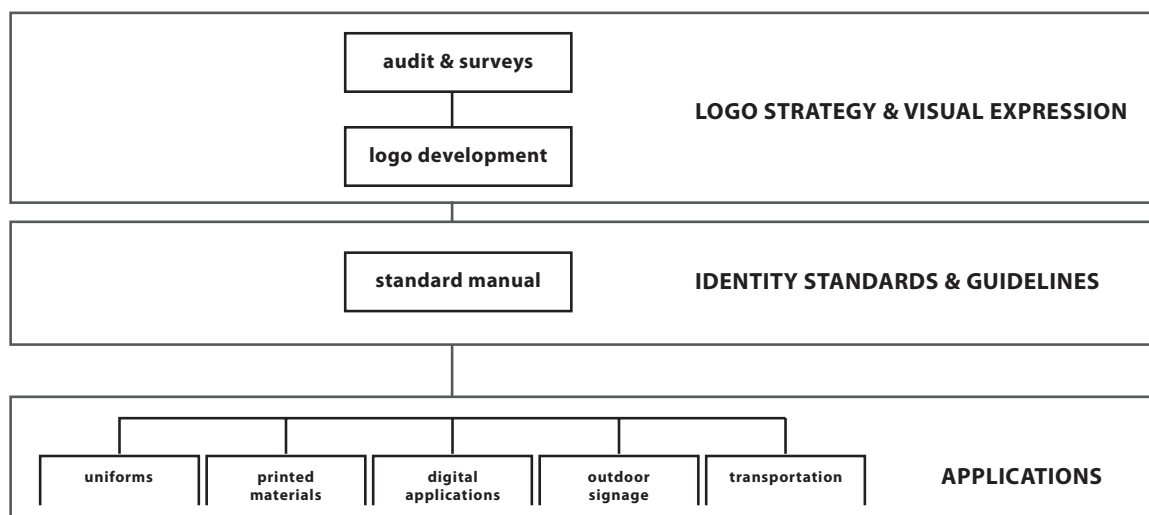
Wally Olins evaluates the expression of corporate identities through three separate but interrelated themes: coherence, symbolism and positioning, in his book, *Corporate Identity*. Olins defines coherence as the presentation of a corporation as clear and logical, where each part relates to every other part of the corporation, its divisions and brands. Consistency of names and visual styles associated with the corporation or product is needed to build trustworthiness. A corporation's philosophy and aspirations are symbolized so internal staff can share the same principles, then communicate those values to external colleagues. It is the symbolization of these values that represents a standard and encourages consumer loyalty. Positioning is the way a corporation differentiates itself and its products from competitors in the marketplace. "When companies lose sight of their individuality, their real purpose and strengths; they get deflected – often through peer pressure – into making mistakes."<sup>17</sup>

Gobé illustrates a traditional corporate identity program with a system-based model whose objective is to unify the company and to communicate a new vision of the identity to

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<sup>17</sup> Wally Olins. *Corporate Identity* (London: Thames and Hudson, 1989), 9.

the consumer (Figure 12). It is internally driven with minimal input from external sources. To be effective, a branding audit needs to be performed by analyzing the brand equity of the corporation or product and by interviewing employees. The results from the audit and surveys help the designer in the development of logo designs. The objective is to bring visibility, stability, and consistency of the visual identity through a standards manual and across all applications.



**Figure 12. Traditional Corporate Identity Program (System based)<sup>18</sup>**

Human dynamics are missing in the traditional model of a corporate identity program. To be relevant in the new consumer-driven economy there needs to be a change in the corporate philosophy. Top management needs to rethink their business strategy and approach the new identity from an emotionally branded perspective. Emotional branding enhances corporate branding with a point of view that integrates the human factor and provides a more cohesive vision consistent with the financial, business, and marketing objectives of a

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<sup>18</sup> Marc Gobé, *Emotional Branding* (New York: Allworth Press, 2001), 138.

company.<sup>19</sup> The visual identity engages consumers on an emotional level, creating trust and forging a deep, lasting connection.

“The logo is the point of entry to the brand,” states graphic designer Milton Glaser in the book, *Brand New*, edited by Jane Pavitt. Where branding is the process of attaching a name and reputation to something or someone, the logo is the most recognizable feature of the brand. A brand’s strength is dependent on the connection between the logo, the brand, and the message communicated to the consumer. A brand name can be the company or the product. A family of branded products, all owned by the same company, may share certain features of their brand image while possessing a distinctive character for the specific product. Each individual brand depends on the image of the parent brand.

Strong brand images are the result of a successful development between the product and the consumer requiring marketing and economic investment. Branded products or services are often linked to lifestyle attributes. Shifts in social and political tides can result in a loss of brand popularity.

Bruce J. Brigham summarizes his own personal experiences in the *Interiors & Sources* article, “Successful Brands Start With Strategy”. Brigham finds a successful brand to be a brand reflection of the consumer to the product. A brand must have an emotional connection to the consumer; one that leaves a lasting impression that keeps hold of the consumer in the future. Brand designers are ultimately experience designers, who look ahead and chart a course that will take the company, product or service into the future. It is a

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<sup>19</sup> Marc Gobé. *Emotional Branding* (New York: Allworth Press, 2001), 158.

strategic course that connects the aspirations and meanings of the product to the aspirations and feelings of the consumer.

Oscar Person and Dirk Snelders infer in their *Design Issues* article, “Brand Styles in Commercial Design,” that companies can gain a competitive advantage through brand styles by focusing on establishing a distinct style to help consumers recognize the products of a particular brand. The major aim is to associate certain tangible product attributes (shapes, colors, materials, etc.) with a specific message. Wheeler and Katz, in their book *Brand Atlas*, agree that the human brain acknowledges shapes first, followed by an emotional connection to color, and the understanding of text last. When consumers are exposed to logos frequently, the brain recognizes the distinctive shape with speed and connects its association to the brand. This is why consumers can identify a brand when only a portion of the logo is in view as illustrated in Figure 13.



**Figure 13. Letterforms from Disney, Adobe, and Budweiser**

In his book, *The Brand Gap*, Marty Neumeier discusses five disciplines of branding: differentiate, collaborate, innovate, validate, and cultivate. Differentiate is how a company sets themselves apart from competing businesses or products. Our brains recognize differences between the things we see. If a company’s logo is designed using the same, over-

used components that every other competing company logo is designed with, none of the logos will stand out from the crowd. This is why a designer needs to ask: who are you, what do you do, and why does it matter? When something is new, in its design and concept, it stands out, and our brain recognizes the contrast from other logos.

“We have moved from a one-size-fits-all economy to a mass-customization economy, the attention of marketing has shifted from features, to benefits, to experience, to tribal identification (Figure 14). This shift demonstrates that, while features and benefits are still important to people, personal identity has become even more important.”<sup>20</sup>

**THE EMPHASIS OF MARKETING  
APPEALS HAS SHIFTED.**



**Figure 14. The Evolution of Marketing,<sup>21</sup>**

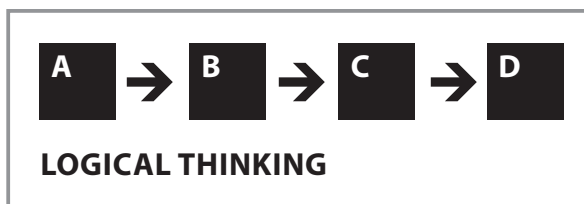
Collaboration is a method of building and managing a complex brand that requires the coordination of a network of creative efforts by a team of designers and specialists. Neumeier discusses three different methods of managing brand collaboration: outsourcing the brand to a one-stop shop, outsourcing to a brand agency, and steering the brand internally with an integrated marketing team.

<sup>20</sup> Marty Neumeier. *The Brand Gap*, (Berkeley, CA: New Riders, 2006), 38.

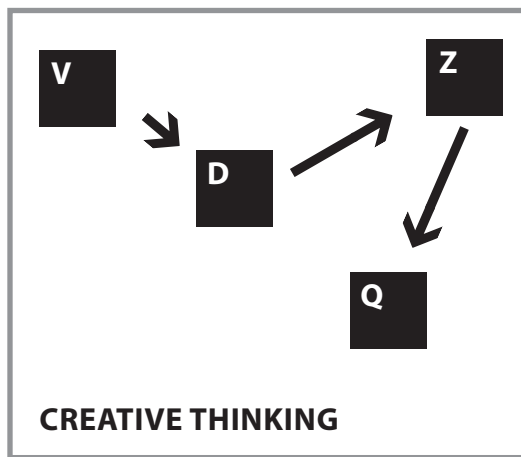
<sup>21</sup> Ibid., 38-39.



Innovation is how a company becomes a leader instead of a follower. The natural inclination of human beings is to go along with the group (Figure 15), but to achieve originality what is comfortable needs to be abandoned, and new directions need to be explored. Creativity isn't just reinventing what is already there, but thinking in completely new directions (Figure 16).



**Figure 15. Logical Thinking<sup>22</sup>**



**Figure 16. Creative Thinking<sup>23</sup>**

According to Neumeier, validation is the process of measuring brands against meaningful criteria, which he breaks down into five areas of communication: distinctiveness,

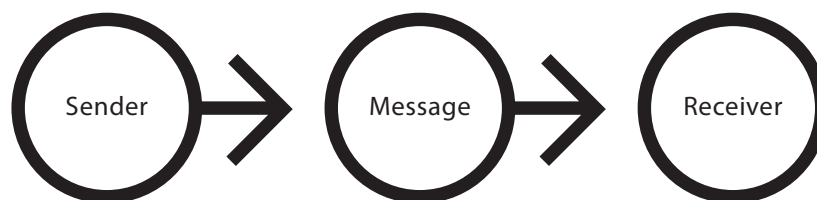
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<sup>22</sup> Marty Neumeier. *The Brand Gap*, (Berkeley, CA: New Riders, 2006), 76.

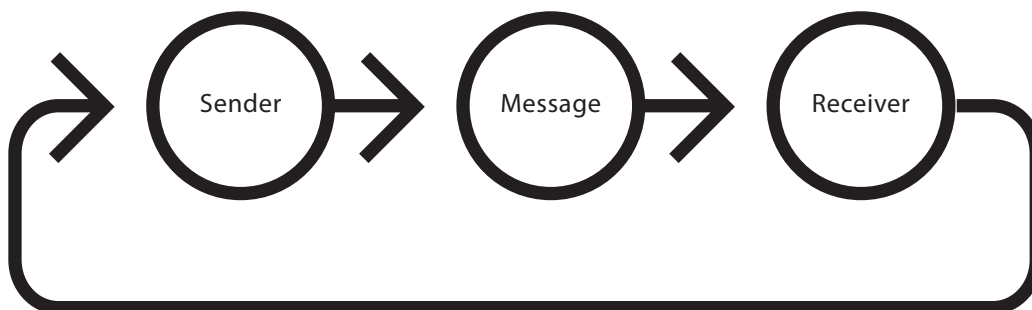
<sup>23</sup> *Ibid.*, 77.

relevance, memorability, extendibility, and depth. In the area of “green” design, distinctiveness appears to be lacking in the majority of current identities. If a corporation or product logo does not stand out from the crowd, the message is also lost. Neumeier relies on the “swap test” to determine if a logo is distinctive. In the “swap test” the name or visual element of a logo is “swapped” for the name or visual element in a logo from a competing company or even an unrelated company. If the resulting logo is better or no worse than the original, the original logo needs improvement.

Communication is the key to validation. The standard model of communication starts with the sender and ends with the receiver (Figure 17). Corporations today cannot afford to use this model; feedback (validation) is needed to determine the success of the message (Figure 18). Meaningful marketing communication is a dialog. According to Neumeier the more feedback received the stronger and more focused communication becomes.



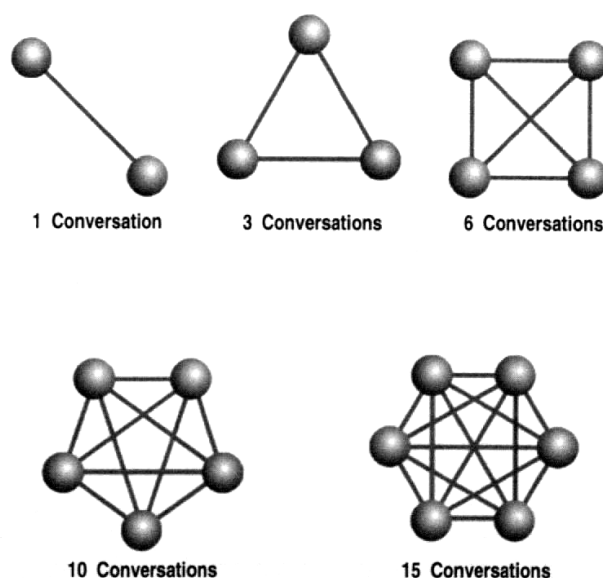
**Figure 17. Old Communication Model<sup>24</sup>**



**Figure 18. New Communication Model<sup>25</sup>**

<sup>24</sup> Marty Neumeier. *The Brand Gap*, (Berkeley, CA: New Riders, 2006), 102.

According to Ward Hanson, in his book *Principles of Internet Marketing*, the Internet has amplified the power and accelerated the speed of feedback from consumers to businesses.<sup>26</sup> Email, Usenet groups, chat rooms, social networks, and industry portals are Internet resources that make word-of-mouth both powerful and dangerous tools. As shown in Figure 19, the number of possible conversations accelerates every time one individual is added to the group. Individuals are more likely to share information, advice, and expertise with friends or colleagues through these sites. A small number of experiences can be turned into a large number of attitudes through the Internet. Negative word-of-mouth, which would have dissipated under human-to-human contact, can turn viral due to the fast-paced nature of networking on the Internet. Companies need to be smart and keep on top of these venues.



**Figure 19. How word-of-mouth spreads on the Internet**

<sup>25</sup> Marty Neumeier. *The Brand Gap*, (Berkeley, CA: New Riders, 2006), 103.

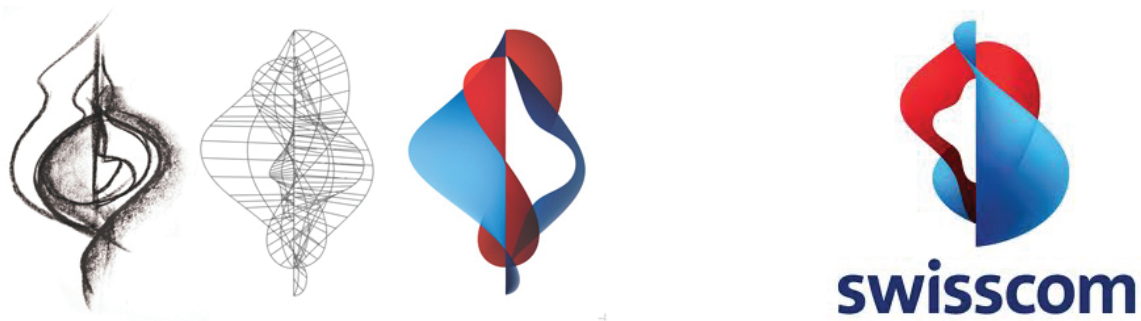
<sup>26</sup> Ward Hanson. *Principles of Internet Marketing*, (Cincinnati, Ohio: South-Western College Publishing, 2000), 271.

Cultivation is a term Neumeier uses to describe successful businesses that continually adapt to changes in the marketplace, the industry, the economy and society. Identities behave like living organisms, which shift and grow, divide and combine as needed. Identities that strive for uniformity and consistency are being replaced with identities that have qualities of being alive and dynamic; yet retain their defining attributes, which communicate the intended message of the corporation or product.

Google may be the most quintessential example of a brand that is alive and dynamic. Creativity is the uniformity for the Google mark, which constantly changes, yet communicates the attributes of the corporation without any confusion (Figure 20). Other brands that are considered dynamic are Swisscom (Figure 21) and Adbusters (Figure 22). Swisscom wanted a brand that stood for more than communication, it needed to stand for community. The new identity evolves around a central axis, as does the business, and can be used in print or animation. Adbusters is a social activist magazine concerned with the erosion of our physical and cultural environments by commercial forces, and is dedicated to create a balance between economy and ecology. The Adbusters logo changes, possibly as a small protest to consumerism.



**Figure 20. Various Google Logo Designs, <http://www.google.com>**



**Figure 21.** The creative evolution of the Swisscom logo and the final print logo



**Figure 22.** Various Adbusters logos

## 2.3 Trademark Classification

Per Mollerup is a Professor of Communication Design at Swinburne University of Technology in Melbourne, Australia and the author of several books on design. His book, *Marks of Excellence*, is a very thorough exploration of the taxonomy of trademark design classifications, theories, and styles. Mollerup looks at the nature of trademarks and how this translates into the communication of a value toward a corporation, product or service.

The 2011 edition of the Merriam-Webster dictionary defines trademark as a device (distinctive design, picture, emblem, logo, word or wording, or combination thereof) pointing distinctly to the origin or ownership of merchandise to which it is applied and legally

reserved to the exclusive use of the owner as maker or seller. Mollerup points out three distinct parts to this definition: the mark, the application, and the purpose.

The mark is ‘a distinctive design, picture, emblem, logo, word or wording, or combination thereof’. The application is the exclusive use of the trademark by the owner as maker or seller, and the purpose is to distinctly point to the origin or owner as maker or seller. Because of the wide range in the definition of the ‘mark’, Mollerup breaks down the taxonomic structure of the trademark into thirteen final classes in his ‘Taxonomic Tree of Trademarks’.

As illustrated in Table 1, Mollerup categorizes the trademark into graphic marks and non-graphic marks. Graphic marks are sub-categorized into picture marks and letter marks. Picture marks are sub-categorized into figurative and non-figurative marks, while letter marks are sub-categorized into name marks and abbreviations. Following the table, the final thirteen classes of trademarks include: descriptive, metaphoric, found, non-figurative, proper names, descriptive names, metaphoric names, found names, artificial names, acronyms, non acronym initial abbreviations, non-initial abbreviations and non-graphic marks. This taxonomy works relative to exclusivity and to the isolated qualities of trademarks.<sup>27</sup>

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<sup>27</sup> Per Mollerup, *Marks of Excellence: The history and taxonomy of trademarks* (London: Phaidon, 1997), 98.

Trademarks 1	Graphic marks 1.1	Picture marks 1.1.1	Figurative marks 1.1.1.1	Descriptive marks 1.1.1.1.1	
				Metaphoric marks 1.1.1.1.2	
				Found marks 1.1.1.1.3	
				Non-Figurative marks 1.1.1.2	
		Letter marks 1.1.2	Name marks 1.1.2.1	Proper names 1.1.2.1.1	
				Descriptive names 1.1.2.1.2	
				Metaphoric names 1.1.2.1.3	
				Found names 1.1.2.1.4	
				Artificial names 1.1.2.1.5	
			Abbreviations 1.1.2.2	Initial Abbreviations 1.1.2.2.1	Acronyms 1.1.2.2.1.1
					Non-Acronyms Initial Abbr. 1.1.2.2.1.2
				Non-Initial Abbreviations 1.1.2.2.2	
				Non-Graphic marks 1.2	

**Table 1. Taxonomic Tree of Trademarks (final classes italicized)<sup>28</sup>**

Mollerup also categorizes trademarks through the principle of division, which refers to the material qualities of trademarks and to the referential qualities between the trademark and its object (the meaning of the trademark). The material qualities include dimensions (type and number), graphic form, picture form, letter combination form, abbreviation form, and initial abbreviation form. Referential qualities include visual and linguistic references. The resulting final classes in this taxonomy match the final classes in the Taxonomic Tree of Trademarks.

Motifs are another method Mollerup dissects in the classifying of trademarks or logos. The list of motifs is endless; what is important to understand that indifferent contexts,

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<sup>28</sup> Per Mollerup, *Marks of Excellence: The history and taxonomy of trademarks* (London: Phaidon, 1997), 99.

cultures, or participants, the understanding of the motif can vary. For example, animal motifs are very common due to the qualities associated with the specific breed of animal.

Trademarks that use animal motifs are figurative marks because they show something that is recognizable. Animals are often a metaphor for power or reliability. A fish used in the logo of a fish market is a descriptive motif. Found motifs have an arbitrary relationship between the motif and what it represents. In “green” industry, common motifs used in logo design are leaf shapes, water droplets, and recycling arrows.

## 2.4 Design Ethics

The AIGA (American Institute of Graphic Arts) Standards of Professional Practice defines the expectations of a professional designer and the principles of integrity and respect for the design profession, colleagues, clients, and consumers and for society as a whole. In regards to a designer’s responsibility to society and the environment, the standards state, “A professional designer shall take a responsible role in the visual portrayal of people, the consumption of natural resources, and the protection of animals and the environment,” and “a professional designer shall consider environmental, economic, social and cultural implications of his or her work and minimize the adverse impacts.”<sup>29</sup> The AIGA board of directors adopted the most recent Standards of Professional Practice in November 2010.

Judith Schwartz discusses marketing social responsibility in her contribution to Steven Heller and Véronique Vienne’s anthology, *Citizen Designer: Perspectives on Design Responsibility*. Schwartz defines ‘cause-related marketing’ as a strategy where a company or

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<sup>29</sup> *AIGA Standards of Professional Practice*, accessed 15 April 2011, <http://www.aiga.org/content.cfm/standards-professional-practice>



product sponsors a social issue or cause. This strategy enhances their public image and boosts sales, while providing benefits to a worthwhile charity, but it has also caused controversy, criticism, and charges of exploitation. Carol Cone of Edelman, an independent public relations firm, disagrees and believes the partnership of companies with a good cause is a winning affiliation for both parties. Cone works to create public-private partnerships for social good, where corporations realize they need to stand for more than the bottom line. Cone seems to be much more idealistic than Schwartz, who states the bottom line is not about raising consciousness or benefiting society, but making a profit and self-interest. Cone does warn in this essay that “green marketing” for some companies has turned into “green scamming,” which she defines as the exploitation of environmental marketing.<sup>30</sup>

Activist Kalle Lasn believes “green washing” is more prevalent than companies who are serious about sustainability, which consider the cost of their products from cradle to grave. Lasn believes most companies practice “green thinking” which is the promotion of the idea of being environmentally responsible to the public. He believes companies place green logos on their green packages, which make their products appear “green.” Veronique Vienne, who interviewed Lasn for the Heller and Vienne anthology, discusses with Lasn the designers’ role in sustainability. Lasn summarizes that designers cannot rely on their clients to set ethical standards as ecological consequences are considered, which is why it is

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<sup>30</sup> Steven Heller and Véronique Vienne, *Citizen Designer: Perspectives on Design Responsibility* (New York: Allworth Press, 2003), 16.

important for the design profession to direct a code of ethics.<sup>31</sup>

Tom Russ, Professor of Environmental Technology and author of *Sustainability and Design Ethics*, summarizes that designers, by virtue of their specialized knowledge, are obligated to protect the public health, safety, and welfare and have an ethical duty to safeguard the environment. Russ states this obligation requires designers to understand the implications of their designs.

The expectations of the professional graphic designer to be responsible to society and the environment require knowledge beyond design alone. The Federal Trade Commission (FTC) has produced guides for the purpose of honest environmental marketing claims. Guides apply to labeling, advertising, and promotional materials and to all forms of visual identity (logos, symbols, words, and product brand names). Marketing through digital or electronic means and print are also included. The guides apply to any claim about environmental attributes of a product or service for personal, household or commercial, institutional, or industrial use.

The FTC guides are not legislative rules, nor are they enforceable regulations. The guides are composed of general principles and specific guidelines on the use of environmental claims, which must be supported by evidence and must not be deceptive.<sup>32</sup> Multiple examples are cited throughout the guides, which are much more helpful than the legal wording in the regulations, and can be found in the appendix.

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<sup>31</sup> Steven Heller and Véronique Vienne, *Citizen Designer: Perspectives on Design Responsibility* (New York: Allworth Press, 2003), 242.

<sup>32</sup> *Guides for the use of environmental marketing claims, Section 260.3*, accessed 03 March 2011, <http://www.ftc.gov/bcp/grnrule/guides980427.htm>

## 2.5 Conclusions from the literature

This literature review develops a solid foundation of design research for successful “green” logo design. There is an overwhelming agreement between various designers that in today’s consumer-driven economy, visual identities must connect emotionally to consumers to be successful, and the product or service must be desired instead of needed. The literature sources suggest that collaboration between the designer and the top management in a corporation is needed to have a successful re-branding. The AIGA believes designers should be ethically responsible to design honestly and with regard to environmental and cultural implications.

The literature sources imply that successful logos need to be creative and innovative, but in the world of “green” industries, logos have “followed the crowd” using cliché images and colors to the point where it is hard to distinguish one corporation, product or service from another. Designers need to step out of the “green” box and look to what is distinct and memorable about each individual client, instead of relying on over-used motifs as visual elements in the logo.

Through the steps of the re-branding process, this study will convey the importance of each step, and the process as a whole, as it proposes a process for the design of visual identities for “green” industries.

## CHAPTER 3. METHODOLOGY

In order to attain the goals of this study, to create a process for designers to use when creating visual identities for “green” industries, a thorough branding audit of Nature’s Marketing needed to be performed and analyzed. This analysis produced a list of problematic features and discovered a unique feature of the biowaste renewable process that could be used as inspiration for a new logo design.

### 3.1 Branding Audit

The branding audit began with an interview with the CEO of Nature’s Marketing, John Kimberlin. A series of questions were asked:

- What are the core values (mission statement) of the corporation and product?

*Biowaste is a positive resource that can benefit agricultural businesses, better the environment and reduce our consumption of other fuels.*

- What products and/or services are offered?

*Nature’s Marketing can produce heated air, heated fluids, steam, or electricity. The potash that is left may be used as fertilizer.*

- Define the qualities of these products and/or services.

*Biowaste has a huge potential as an energy source...*

- Who is the target audience? Where is the target audience located?

*There are numerous businesses that could benefit from a Nature’s Marketing unit. Race (horse) tracks and casinos, fairgrounds...*

- What do they think about your current brand?

*I'll admit there is some confusion with the Nature's Marketing name...*

- What would you like them to think about your brand?

*I want people to think of biowaste and bioenergy as a positive thing.*

- How will you attract them to your products and/or services?

*The easiest way to convince potential consumers/clients that Nature's Marketing can benefit them is to give them a demonstration of how it works.*

- What is the tagline of your company?

*Mother Nature's Battery is one of the taglines we use.*

- What message does your tagline send to your prospects?

*At that time I was focused on creating heat for my farm.*

- Who are your competitors?

*There are other biowaste renewable companies out there, but none that use the combustion technique that we do.*

The answers above are condensed; a complete interview with Kimberlin can be found in the appendix. Following a demonstration of the Nature's Furnace unit and interviews with employees, brainstorming sessions were ignited to create a list of possible name changes for the company. Figure 23 is a list of the current names being used by Nature's Marketing and their three renewable units. The last name on the list, Mother Nature's Battery, is a tagline, which is often confused as a unit name.

Nature's Marketing:	Bio-Power Boiler, Inc
Nature's Furnace, Inc	Bio-Electric, Inc
Mother Nature's Battery	

**Figure 23. Current Company and Unit Names (and tag line)**

All names from the brainstorming sessions were kept no matter how eclectic they seemed to be because a brainstorming session is intended to generate a large number of names/words associated with the company names, which can inspire more names (Figure 24). One problem with the Nature's Marketing nomenclature system is that it seems to be going in three different directions at the same time. There is the "Nature's ..." name, "Mother Nature's..." name, and the "Bio-..." name. Starting a nomenclature system from the beginning gives the designer the opportunity to create a system that is interrelated to one another. Figure 25 contains names from the brainstorming session that were found to already be in used by competing companies by performing a Google search. This list also shows the possibility of consumer confusion due to the similar nature of these competing names to the names of Nature's Marketing units.

Bio Blast	Green Heat	Organic Energy
Bio-Resources	Green Energy	Organergy
Bio-Barn Boiler	Green Power	
Biomass Energy	Green Fire	Recycled Energy
Compost Kiln	Meadow Muffin Forge	Sustained Energy
Conversion Energy		Sustainable Energy
	Natural Energy	
Eco-Energy	Natural Power	Waste to Energy
Energy Resource	Nature's Power	Waste Converts
Energy Resources	Nature's Capital	Waste Wonders
Enviro-Energy	Nature's Electric Power	Waste Rewards
Enganic		
Enorga		

**Figure 24. Names from brainstorming session**

Bioenergy
Bio-Energy
Nature's Energy
Mother Nature's Marketing
Bio Waste

**Figure 25. Names from brainstorming session, which are being used by other companies**

The list of names was reviewed by the CEO of Nature's Marketing and the decision was made to keep the present names used by the Nature's Marketing system. According to the authors of Brand Culture, name changes are unlikely to occur unless the organization of the corporation has changed due to a change in ownership, a change in the corporation's market position, an outdated image, reputation problems, or a major crisis. This author viewed the decision not to rename part of the units as a way to bring order, continuity, and growth to the company's brand as a missed opportunity by the CEO. An identity statement should be developed around the product or service the brand would be built.

### **3.2 Research of Existing Biowaste Logos**

Initial research should include a search of all existing brands and logos of related companies or services. This will help recognize identities that are successful and identities that fail. As stated in the introduction, images of leaves, water droplets, and recycling arrows are motifs overused to create visual identities for "green" industries. The motif used does not always have a clear association with the company, product or service it is supposed to be identifying with, but because of the association to nature or the feeling of being environmentally friendly, the motif is used.

The logos in Figure 26 were found during a search for biowaste, biomass, and bioenergy logos during the initial research phase of this study and are organized by Mollerup's taxonomic structure of the trademark.

Descriptive marks - images or diagrams, refer directly to the object



Metaphoric marks - refer to their object through a shared quality



Found marks are recognizable but are arbitrary



Non-figurative marks - meaning may need to be explained



**Figure 26. Logos of competing biowaste/biomass/bioenergy companies organized by Mollerup's Taxonomic Structure of Trademarks**



The logos in Figure 27 were found during a search for biowaste, biomass, and bioenergy logos during the initial research phase of this study and are organized by Mollerup's taxonomic structure of the letter mark.

#### Proper names



#### Descriptive names



#### Metaphoric names



#### Found names



#### Acronyms - initial abbreviations



#### Non-acronym initial abbreviations



**Figure 27. Logos of competing biowaste/biomass/bioenergy companies organized by Mollerup's Taxonomic Structure of Letter marks**

This study seems to conclude that logos identifying biowaste/biomass/bioenergy and environmental or organic companies, products, or services are more successful when the logo is designed as a descriptive, metamorphic, or non-figurative mark instead of an arbitrary found mark or letter mark.

The logos in Figure 28 were found during a search for biowaste, biomass, and bioenergy logos during the initial research phase of this study and are organized by motif. The leaf motif, which is a common shape in environmentally friendly logos, can be associated with the terms: nature, growth, organic, and renewable. The first logo in the leaf examples is the logo for “Indiana Bio-Energy” which produces ethanol made from corn. The leaf shape is similar to the leaves on a corn stalk, but much shorter and would not be recognized as such. The second logo, “Bio Diesel” is a logo for a company that produces bio diesel from soybeans. The leaves in the logo are representative of soybean leaves. The third logo, “USA Bio Organic” is the logo for an organization that promotes the production and consumption of organic food products. The fourth logo, “Bio Energy Fuel” is a company that produces biodiesel as a renewable energy source, again from soybeans. The fifth logo, “Biomondego” is a chain store in Portugal that sells dietary and natural foods. The leaf shape was used because of its association with nature, health, and peaceful identity, not an association with the products produced. The leaf merges into a “B” shape and has the organic mood the client wanted.<sup>33</sup> The last logo, “GIVE” Green Independent Viable Energy is a movement in Haiti to be independent from fossil fuels by producing biofuels from sweet sorghum, producing briquettes for heating and electricity.<sup>34</sup> The leaf of the sweet sorghum plant is not shaped like the one in the logo. This movement is also trying to stop the deforestation of this country, which relies on wood as their primary energy source. The leaf is similar in shape to one of the ten different trees this movement is planting, but the majority

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<sup>33</sup> *Biomondego*, Logopond identity inspiration, accessed 2 November 2009, <http://logopond.com/gallery/detail/11990>

<sup>34</sup> *GIVE Green Independent Viable Energy*, Our Advocacy: A Win-Win Synergy, accessed 4 November 2009, <http://www.giveecoenergy.com/global-initiatives/index>

of the trees are a type of palm tree. All of the leaf-shapes used in the examples are similar to soybean leaves, except for the first logo; yet only two of the companies actually proclaim the use soybeans in their products in their company literature.

#### Leaves



#### Water droplets



#### Recycling Arrows



#### Color - Green



**Figure 28. Logos of competing biowaste/biomass/bioenergy companies organized by motif**

The recycling arrows logo has been a part of our everyday lives since it was first designed in 1970 and can be found on any product or container that can be recycled. It has such a strong association with recycling, that it would be hard for those three arrows to mean anything else. The recycling arrows have been incorporated into numerous logos, and

variations of the recycling arrows are a commonly used motif in environmental logos. The row of recycling arrow logos, also in Figure 24, include logos, which promote products made with recycled post-consumer waste plastic, the recycling of conifer trees, the use of solar hot water and solar power systems in homes, the “recycling” of biowaste into energy (Nature’s Furnace), the development of environmentally and economically sound solutions that benefit all governments and international entities all over the world, and the safe disposal of medical and biohazardous waste. Only the first logo, “Earth Plastic”, uses the recycling arrows in its original intent, recycling plastic.

### 3.3 Design of Nature's Marketing logos

Designing a variety of logos followed the audit interviews, the unit demonstration, the brainstorming sessions, and the research of current logos. This author recognized the auger system, inside each of the three biowaste renewable units, to be a unique feature that would be identifiable and rememberable to consumers. Figure 29 shows the step-by-step display of the Nature's Furnace process. This display is used to illustrate how the unit works when it is not operating and at trade fairs. Figure 30 shows how the biowaste is moved from the hopper by an auger into the furnace unit. Figure 31 shows how the biowaste is augered into the furnace unit and the renewable energy is augered out the unit. The augers are enclosed as a safety feature, but the shape of the auger is unique and recognizable (Figure 32).



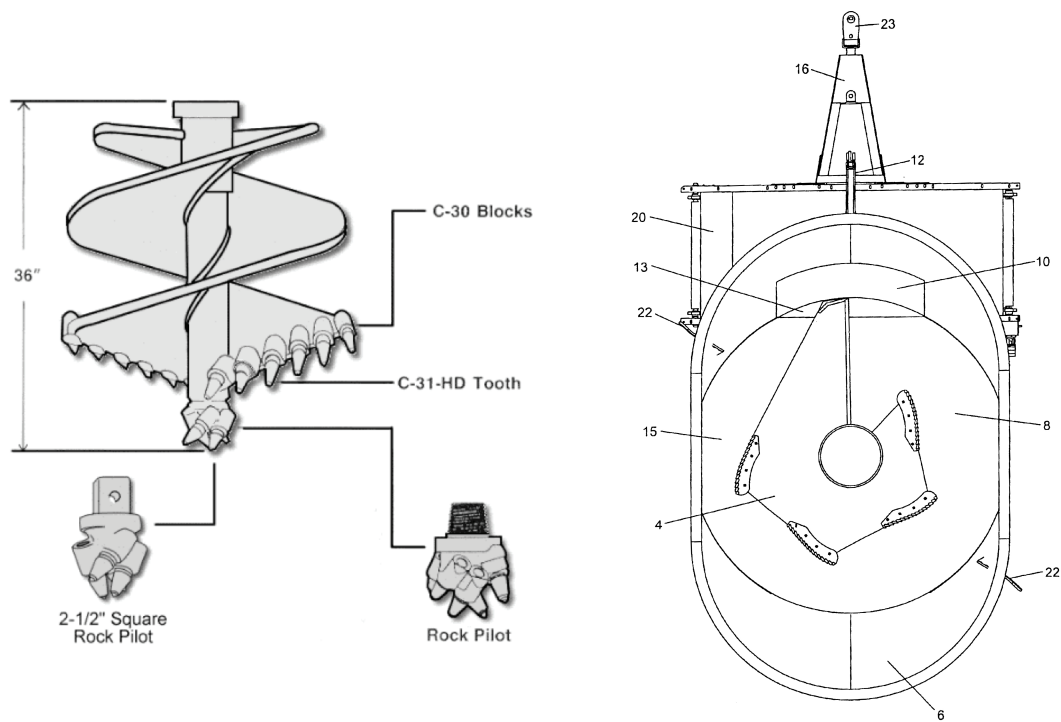
Figure 29. Step-by-step display of the Nature's Furnace process



**Figure 30. Biowaste is augered from hopper to Nature's Furnace unit**



**Figure 31. Biowaste is augered into unit; renewable energy is augered out of unit**



**Figure 32. Illustrations of augers, side view (left) and end view (right)**

Sketches were made using the auger-shape as inspiration from different points of view: vertical side view, horizontal side view, and end view. The idea of transformation and recycling were also sketched as was the flow of biowaste in and energy out of the furnace unit (Figure 33).







There are certain functional criteria that all logos can be evaluated on to determine which identities work and which do not. This criterion is not based on aesthetics because good design is essential; functional criteria helps sort out the characteristics that structure the best identities. This criteria can be found in numerous places, written by numerous designers with slight differentiations, but the following list comes from Alina Wheeler's book, *Designing Brand Identity: an essential guide for the whole branding team*.<sup>35</sup>

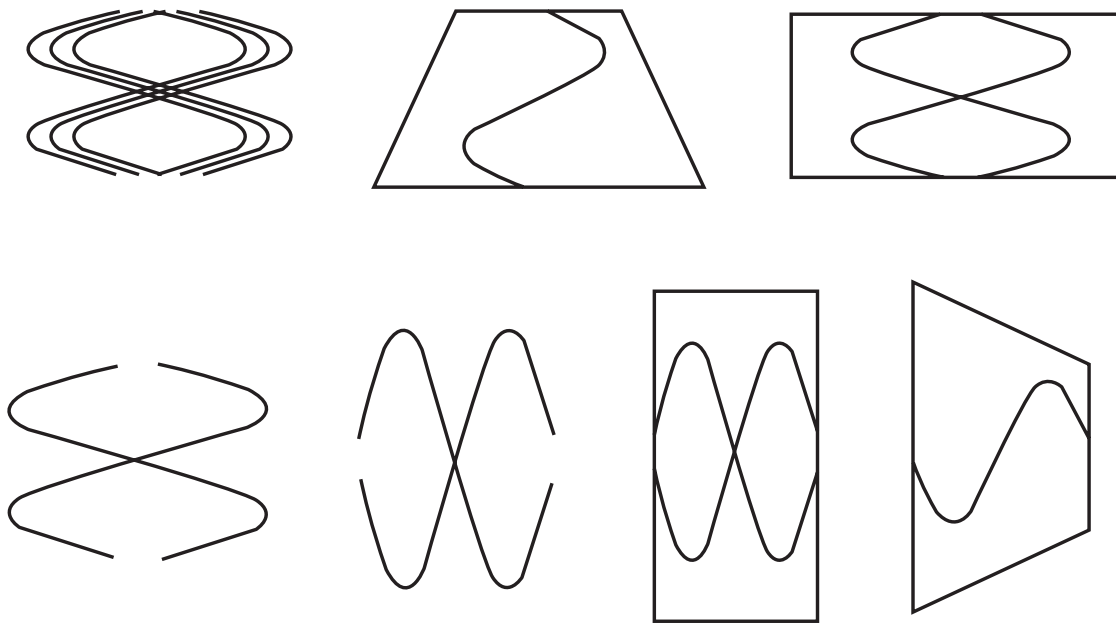
- Bold, memorable, and appropriate
- Immediately recognizable
- Provides a consistent image of the company
- Clearly communicates the company's persona
- Legally protectable
- Has enduring value
- Works well across media and scale
- Works both in black and white and in color

In evaluating the original sketches, the sketches of the Nature's Furnace unit seemed to be unrecognizable to the public as anything other than the geometric shapes they were made of. Some of the transformation sketches, although interesting, would need to have their association to Nature's Furnace explained. Water droplets started entering in to the typography sketches due to the similarity with the shape of the letter "a". Water droplet motifs are overused in the design of "green" identities and have nothing to do with the

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<sup>35</sup> Alina Wheeler, *Designing Brand Identity: an essential guide for the whole branding team* (Hoboken, New Jersey: John Wiley & Sons, Inc., 2009), 30.

biowaste renewable process, so these sketches needed to be redesigned or discarded. It was easy to see how the use of certain motifs became overused in identity design of “green” industry. The shape of the auger needed much more experimentation (Figure 34). The decision was made to design three logos each from a different point of view of the auger.



**Figure 34. Experimentation of the auger shape**

The movement of line when an auger is working is energetic and rhythmic. The undulating movement of the auger moving the biowaste through the renewing process into energy evolved into the mark, which became Logo #1 (Figure 35). This same movement, but from a horizontal viewpoint led to the development of Logo #2 (Figure 36). There are some interesting experiments in Figure 36 with the gradating red center, which could have possibilities for animation on a web site. The final Logo #2 was chosen for its simplicity. The experiments for Logo #3 came from the end view of the auger or top down (Figure 37).

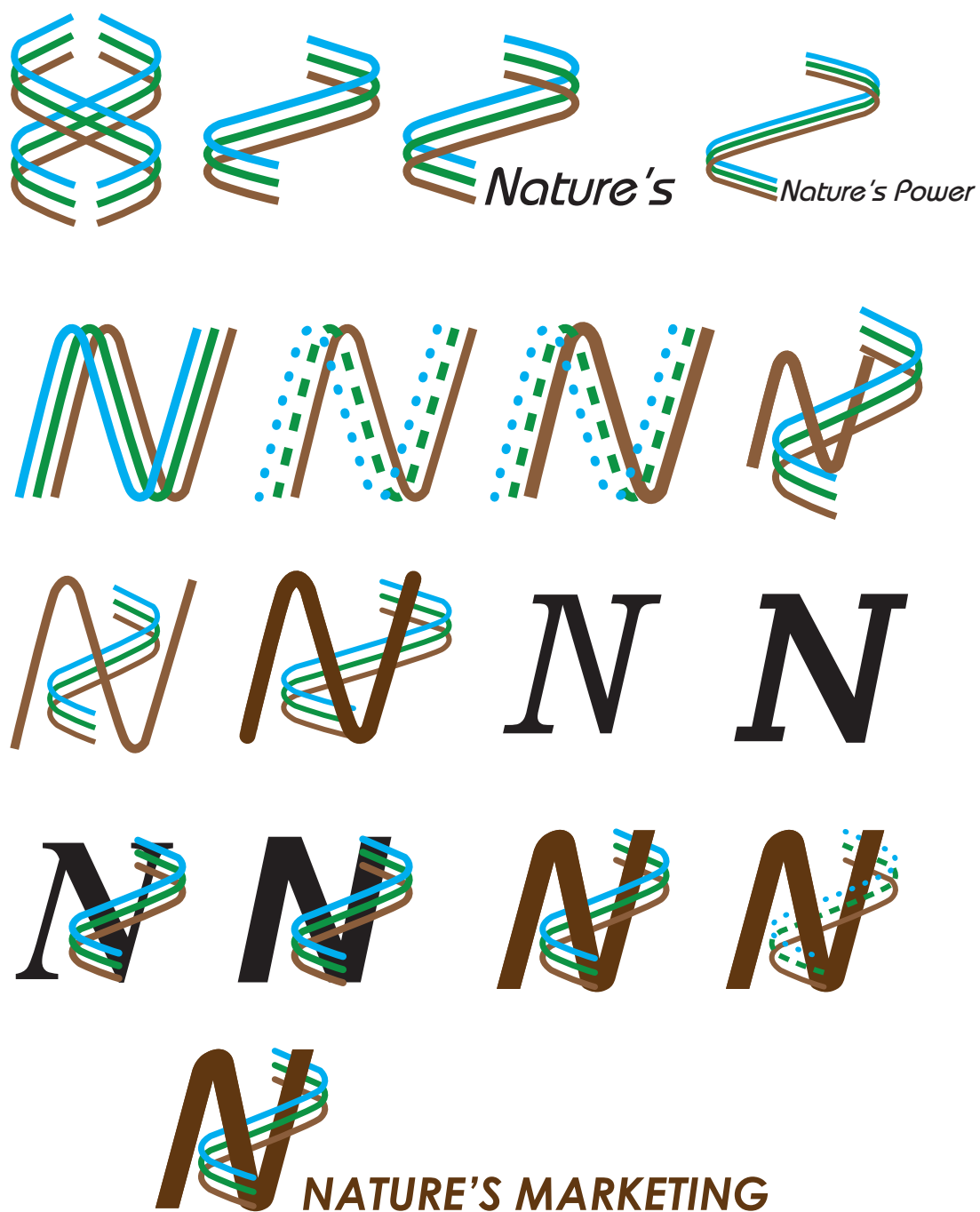


Figure 35. Evolution of Logo #1

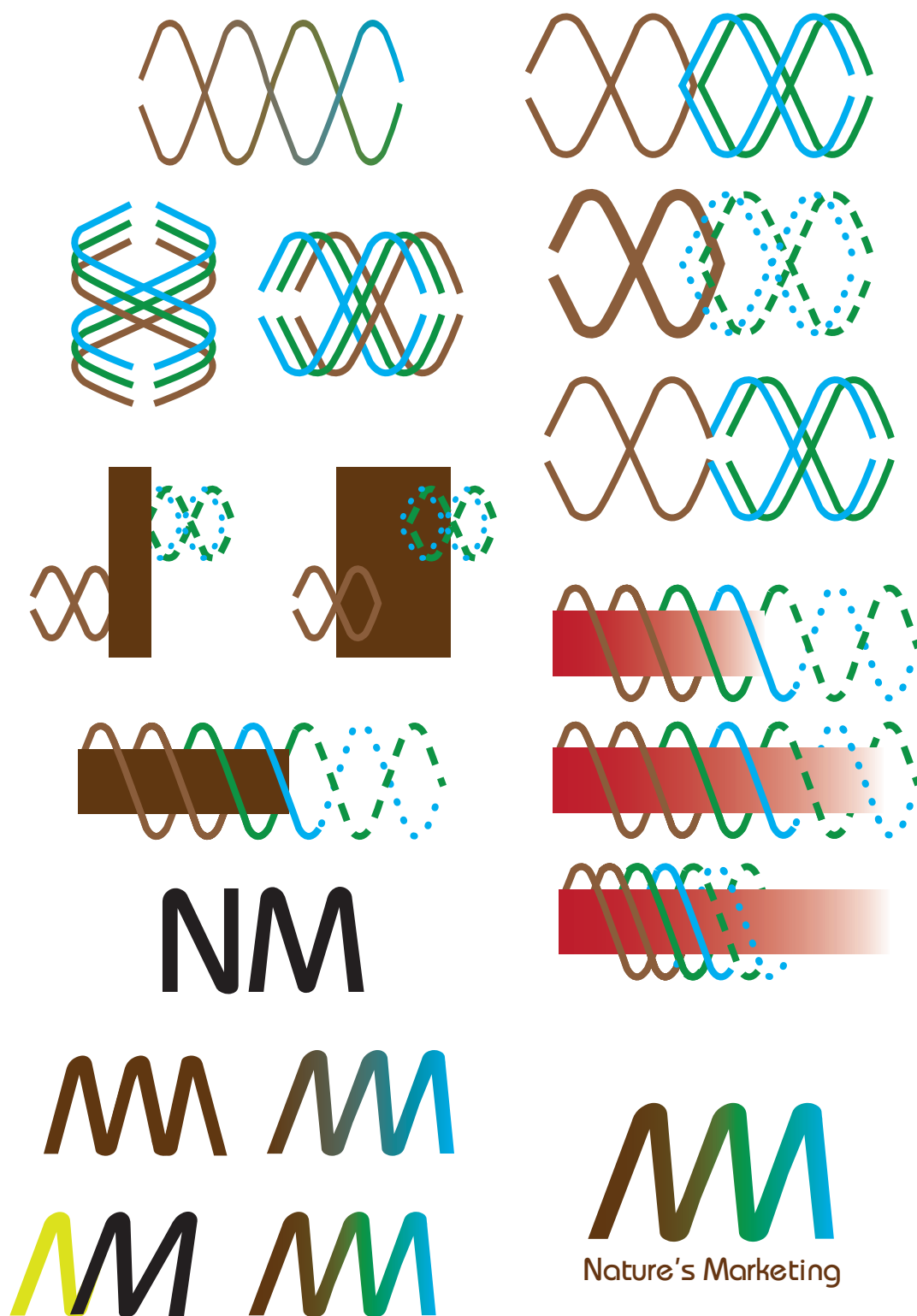


Figure 36. Evolution of Logo #2



**Figure 37. Evolution of Logo #3**

The shape of the auger blades in the first row in Figure 37 are more unusual and the negative space formed is interesting in the second mark; however, most agricultural augers

are more smooth and rounded. Although the formation of the three “comma” shapes can transform into the letter “a”, it was decided to keep the symbol separate from the signature; plus the symbol lost its sense of movement when it is tilted so it “rests” on the baseline of the signature. The symbol alone is simplistic and easy to comprehend when minimalistic and has great potential for creating patterns and textures when used in repetition.

### 3.4 Testing of Nature’s Marketing logos

The three logos, designed to identify the parent company Nature’s Marketing, were finalized and tested on the messages they communicated to the consumer (Figure 38). Each logo contains a symbol based on the shape of the auger at different points of view.



**Figure 38. New logos designed for parent company**

In compliance with the Institutional Review Board, fifteen volunteers completed a short demographic survey before engaging in the study to ensure a wide variety of nationalities participated, plus an even division between genders. The following is the introduction to the study: The purpose of this study is to discover if a process can be created for designers to use when creating visual identities for “green” industries (without using cliché water droplets, images of leaves, recycling arrows or the color green as the dominant color) by concentrating on the processes involved to find inspiration for a distinctive and original mark. In most cases, the designer is working with a product that is not a concrete image: energy, electricity, or with images that are not aesthetic: biowaste. This study will analyze three re-designed logos of one company that uses biowaste as a renewable energy source in an effort to determine which logo best communicates the company’s identity, both domestically and internationally. The following questions were asked in this research:

1. Which of the three logos best communicates energy and why?
2. Which of the three logos best communicates transformation and why?
3. Which of the three logos best communicates a clean, smokeless and odorless product and why?
4. Which of the three logos best communicates the qualities of a safe, efficient, and effective product and why?
5. Which of the three logos best communicates the character of environmentally responsible and why?
6. The color combination of brown, green and blue can best be interpreted with which single word?
  - a. environment   b. biowaste   c. energy   d. clean   e. life   f. none of the options
















The criteria in questions three through five were taken from current promotional material for Nature's Marketing. The sixth question was structured to see how the color combination of brown, blue and green communicated to the consumer. Color can have multiple and diverse meanings across cultures. The color green has been used to identify environmentally friendly companies and products to the point where all green identities look alike. Consumers have personal connections to colors. Colors play an integral role as a memory aid in relationship to logo design.

According to Neumeier, a series of small studies are more effective than most large studies and save time and money. Large detailed studies tend to be so overwhelming that it is difficult to focus on meaningful initiatives. In the end, the results from the small study often reflect the same statistics as the results from the large study.

Table 2 shows the demographic information of all the participants in the study. Men comprised 53% of the study and women comprised 47% of the study. The largest age group of participants was the 26-30 year old group at 53%, followed by the 22-25 year old group (20%), then the 31-40 year old group (20%), and finally, both the 41-50 and 51-60 age groups had 6.5%. Due to the relatively small group of study participants and due to the desire to expand Nature's Marketing internationally, the group was divided into two cultural groups: Asians comprising 33% of the study, and all others (67%). From this comparison, conclusions may be able to be made as to how the logo would communicate in an Asian market. The majority of the participants (67%) are currently in graduate school while participants who have completed their education with a BS/BA degree comprises 20%, and participants who have completed their Master's degree comprise 13% of the study. The vast majority of the participants (73%) considered themselves familiar with green industries,



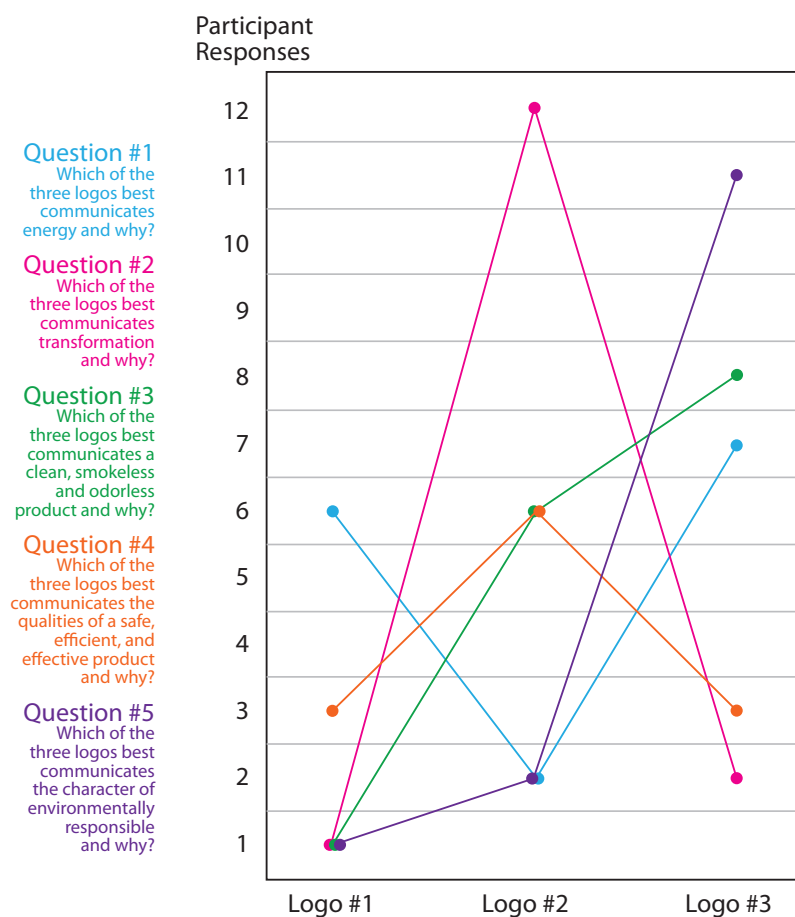
while only 60% of participants said they would be more likely to buy “green” products even

Participant	Age	Nationality	Education	Familiar with Green Industry	Purchase Green Products
1. 	22-25	N American	BS/BA	Yes	No
2. 	26-30	N American	BS/BA	Yes	No
3. 	26-30	N American	BS/BA	Yes	No
4. 	31-40	N American	some Grad school	No	Yes
5. 	26-30	Asian	some Grad school	No	No
6. 	31-40	Asian	Master's Degree	Yes	Yes
7. 	26-30	Asian	some Grad school	Yes	Yes
8. 	22-25	Asian	some Grad school	No	Yes
9. 	26-30	N American	some Grad school	Yes	Yes
10. 	26-30	European	some Grad school	Yes	Yes
11. 	22-25	N American	some Grad school	No	Yes
12. 	26-30	Asian	some Grad school	Yes	No
13. 	26-30	African	some Grad school	Yes	Yes
14. 	51-60	N American	Master's Degree	Yes	No
15. 	41-50	N American	some Grad school	Yes	Yes

**Table 2. Demographic Information of Participants**

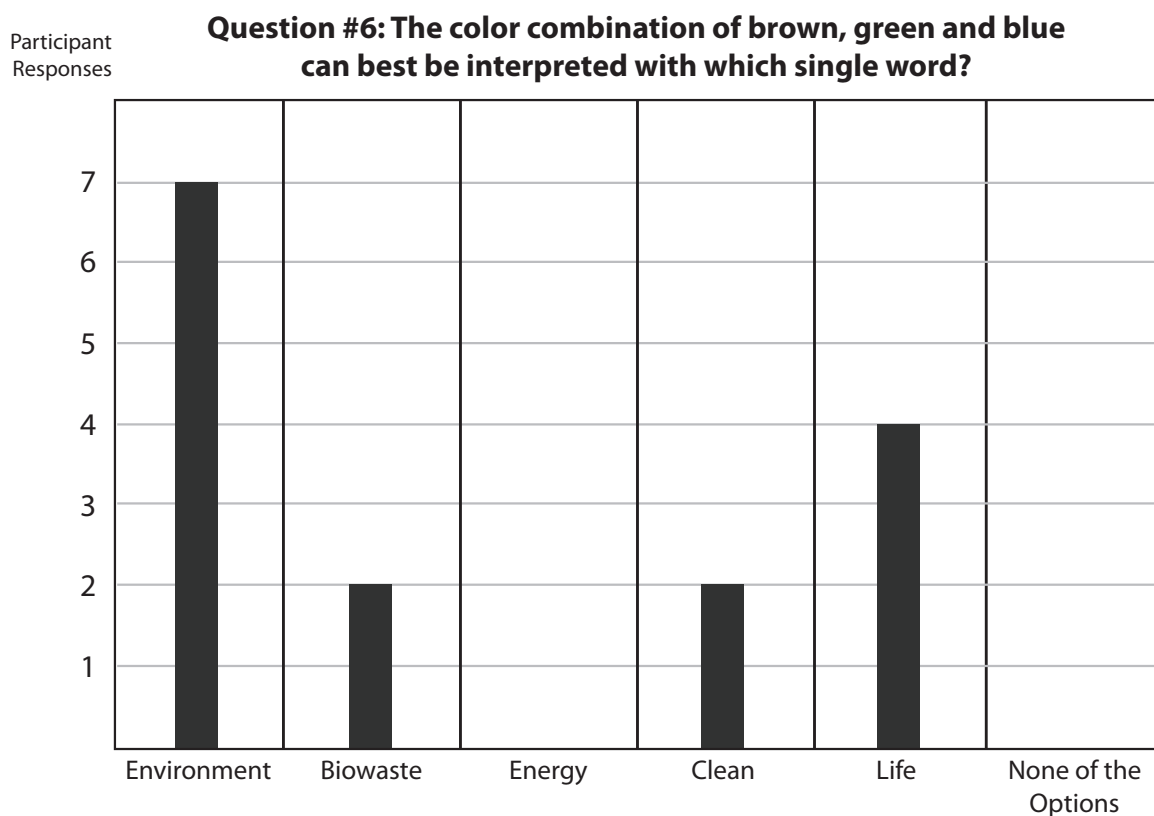
if the price was higher than a product that was not advertised as being “green”. Four participants who were not familiar with any green industries stated they would prefer to purchase “green” products if it was made aware to them. Half of the participants are people who are involved in businesses within the scope of the target audience, while the other half are persons involved in design.

The first sets of statistics charted were based on the total number of responses from all participants. The results can be seen in Table 3. From these results, it can be concluded that Logo #1 does not communicate well as an identity for a biowaste renewable energy company. Logo #2 communicates very well as a symbol for transformation, but does not communicate well as a symbol for energy or environmental responsibility. Logo #3 communicates very well as a symbol for environmental responsibility, very good as a symbol for energy and a product that is smokeless and odorless, but does not seem to communicate well as a symbol for transformation or a safe, efficient, and effective product. There were three no responses for question #4 and one no response for question #5.



**Table 3. Total number of responses to Questions #1 through #5**

The results of Question #6 on how the color combination of brown, blue and green communicated to consumers can be seen in Table 4. Almost half of all the participants chose the word “environment” was the word communicated by the color system in the logos with over one fourth of the participants choosing the word “life.” “Biowaste” and “Clean” each received thirteen percent of the responses, while no responses were given for “Energy” and “none of the options.” Several of the participants gave verbal responses that the color combination was “earthy” and reminded them of the earth, growth, and sky.



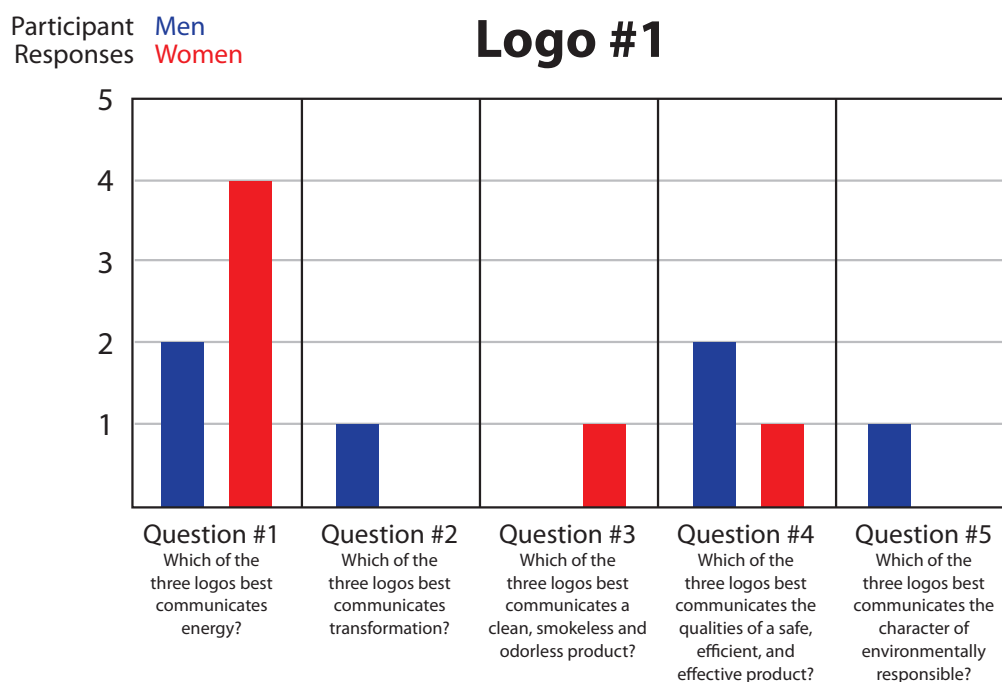
**Table 4. Total number of responses to Question #6**

According to Neumeier, a series of small studies are more effective than one large study, where each study focuses on one aspect at a time. Neumeier also suggests using

ethnography to study consumer behavior. His conclusions influenced this author to evaluate the user answers from different points of view using the demographic information as the variable factors in each study. The first evaluation was based on the gender of each user and the results can be seen in Tables 5 – 8.

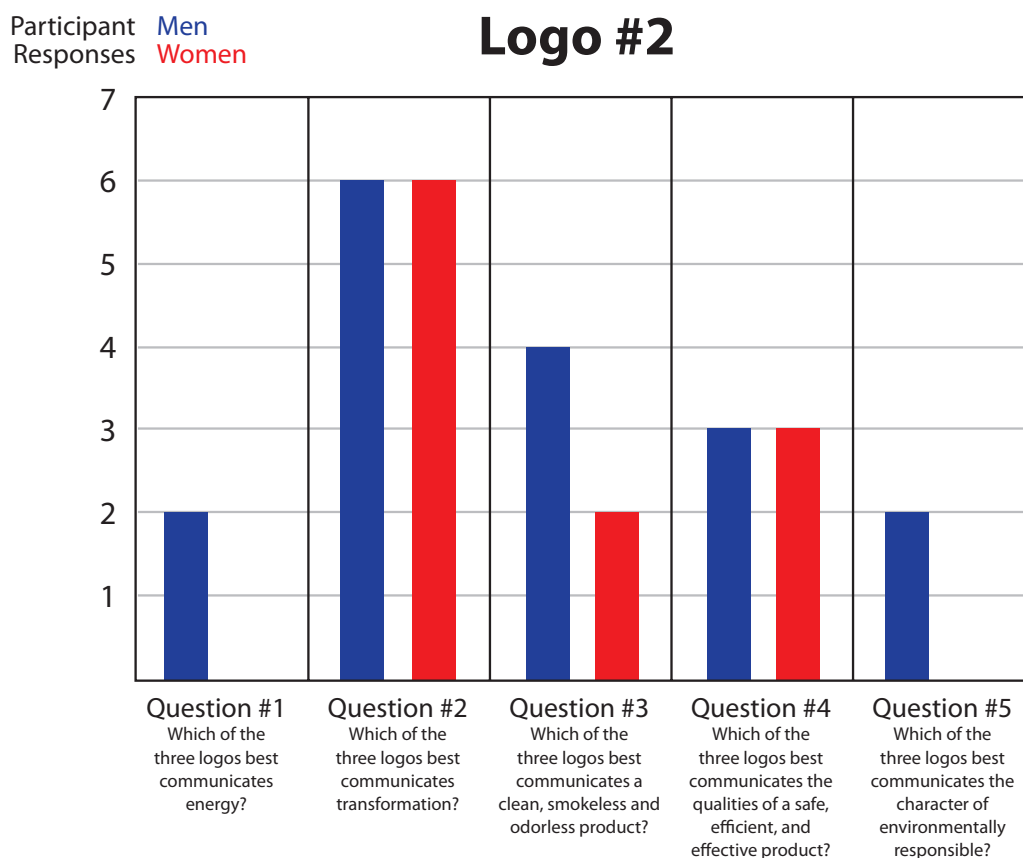
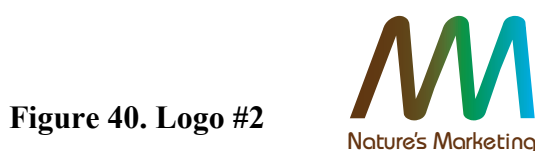
Logo #1 (Figure 39) did not receive many responses to any of the questions asked in the study comparing men and women; however, it did communicate the concept of energy to women twice as much as men. Several of the candid remarks made by both genders about this logo was that the helix-shaped lines reminded the participants of DNA, which made the logo communicate something that was scientific (Table 5).

**Figure 39. Logo #1**



**Table 5. Logo 1: Comparing responses between men and women for Questions #1 - #5**

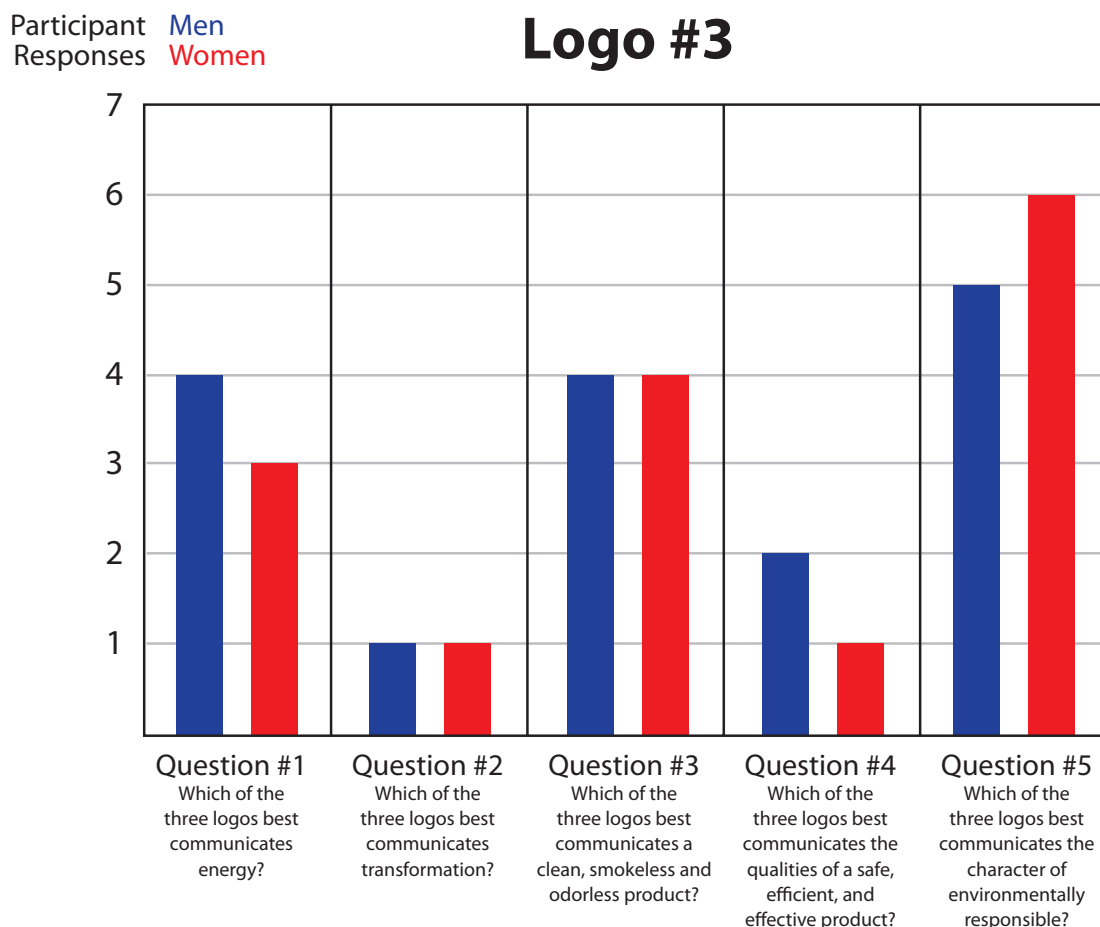
Logo #2 (Figure 40) seemed to communicate fairly equally to both men and women with the same number of men and women (approximately 80%) responding that Logo #2 communicated transformation and approximately 40% responding that Logo #2 communicated a product that was safe, efficient, and effective product. There was a small discrepancy between men and women on how well Logo #2 communicated as a clean, smokeless and odorless product. Where 25% of the men thought Logo #2 communicated both energy and environmentally responsible, there was no response from women. (Table 6)



**Table 6. Logo 2: Comparing responses between men and women for Questions #1 - #5**

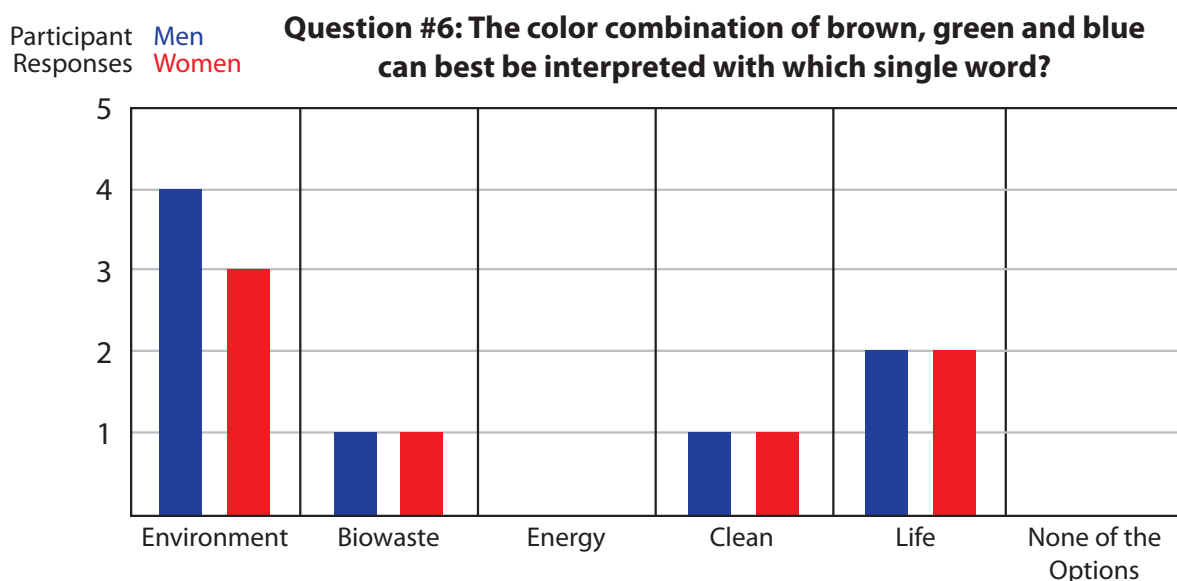
Logo #3 (Figure 41) communicated the most effectively and equally between men and women in regards to every question. The two least effective criteria were the two criteria where Logo #2 was most effective. From this analysis, it could be concluded that Logo #3 would best communicate the message for Nature's Marketing (Table 7), but how do each of the logos compare when the national background of the participant is the variable.

**Figure 41. Logo #3**



**Table 7. Logo 3: Comparing responses between men and women for Questions #1 - #5**

Table 8 shows that the color combination of brown, blue and green communicated evenly between men and women, with environment as the most common response. From the overall study and verbal answers from the participants, the color combination communicates a message that is “earthy” and infers images of the earth, growth, and sky. It can be concluded that the color combination will communicate “environment” to the majority of consumers, but which of the attributes best reflects the values of Nature’s Marketing? Do they want to be known as an energy company or an environmental company? This is a question for the CEO of Nature’s Marketing, John Kimberlin to answer.



**Table 8. Comparing responses between men and women for Question #6**

John Kimberlin’s vision for Nature’s Marketing is for consumers to stop looking at biowaste as a negative product needing to be removed and discarded, filling up landfills and polluting our water sources, and to start looking at biowaste as a positive resource that can benefit their (business) operation. It can better the environment and reduce our consumption

of other fuels. Nature's Marketing website uses the word "energy" in several taglines including: Energy from Biowaste, Biowaste Free Energy Source, and Alternative Energy. Each of the Nature's Marketing units produces biowaste energy, so energy is an important part of the company. However, Kimberlin promotes the fact that there are no bi-products from the process that harm the environment. Potash is a bi-product of the process which farmers purchase to enhance their crops. The steam produced by the process is condensed and naturally evaporates. No un-natural bi-products are produced. Nature's Marketing dedicates an entire page of their website to the different ways Nature's Marketing products benefit the environment. Kimberlin feels his company will be successful if the public views Nature's Marketing as an "alternative energy company that benefits the environment".<sup>36</sup>

Based on this interview, the author feels confident that a color combination, which communicates the idea of environment to consumers, is a positive association.

Nature's Marketing is an international company, with five working units in Northern Ireland and with aspirations to venture into other countries soon, which made it important to see how the proposed logos communicated based on the cultural background of the participants in the testing group. Due to the relatively small group of participants in this test and due to the purchasing power of the Asian market, a comparison between the Asian participants as one group and all other participants as another group would give an idea of how the logo would communicate in Asian countries. Asian participants comprised one third of the testing group. Although representatives of a number of different countries participated in the study, all have lived in the United States for at least one year to up to six years.

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<sup>36</sup> John Kimberlin. Personal Interview. 23 Oct. 2009.



Table 9 shows a side-by-side comparison of Questions #1-#5 from the study and how the Asian and other participants in the testing group responded to each logo (Figure 42). The majority of the Asian participants chose Logo #3 as best communication of energy. All other participants were almost evenly divided between Logo #1 and #3, with one participant choosing Logo #2. Over all, Logo #2 did not communicate well in terms of energy, receiving only two responses total. Logo #3 received one response more than Logo #2.

Logo #2 received the most responses from both groups in terms of transformation. The majority of the Asian participants chose Logo #2, while nine out of ten All Other participants chose Logo #2 as the best communicator of transformation.

Logo #3 received the majority responses from both cultural groups on which logo could represent a product that was clean, smokeless and odorless, with Logo #2 right behind. It could be expected that this trend would continue with a larger study

Question #4, where participants were asked to choose the logo that communicated a product that was safe, efficient and effective, seemed to be the most difficult for participants to answer. Two of the Asian participants and one of the Other participants were not able to answer question #4. Logo #2 received the most responses from both groups; however, the responses were divided somewhat evenly between all three logos.

Logo #3 received the majority of responses from both cultural groups as the logo that communicated the character of being environmentally responsible. Eighty percent of the Asian responses were for Logo #3, with twenty percent (one response) for Logo #1. The responses from the Other group were very similar with seventy percent choosing Logo #3 and twenty percent response for Logo #2, with one individual choosing not to answer.



#1

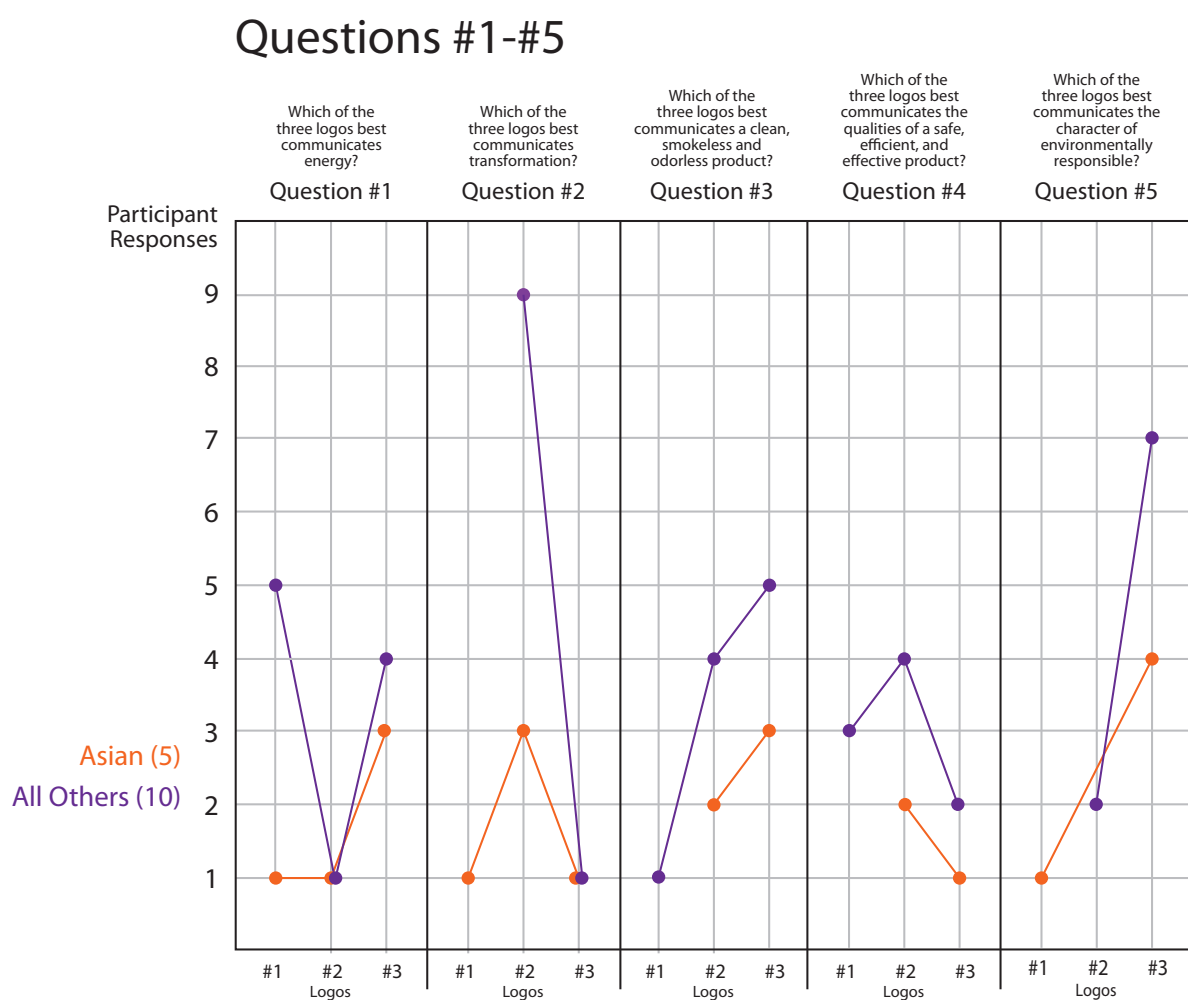


#2



#3

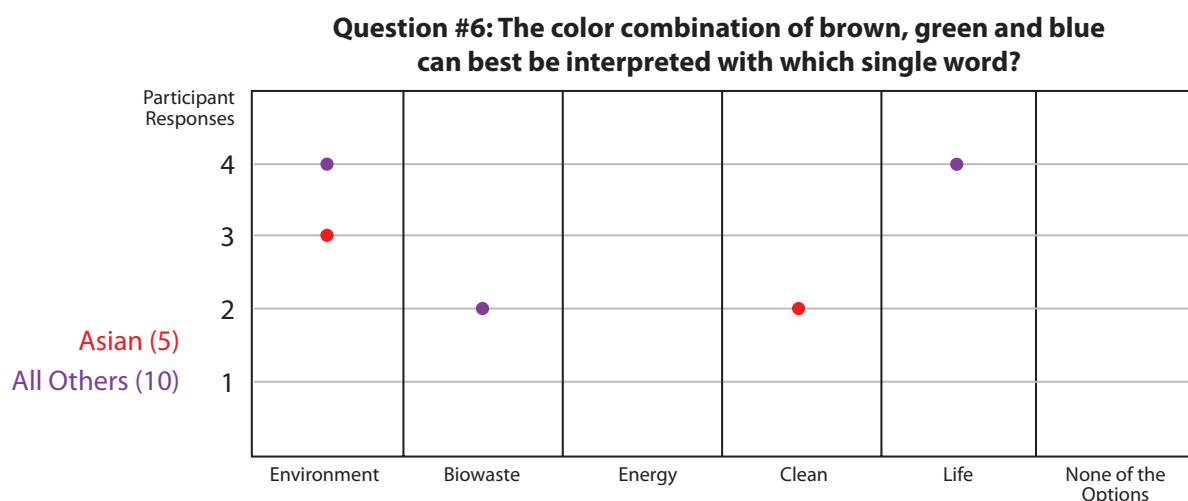
**Figure 42. Logo #1, Logo #2, and Logo #3**



**Table 9. Comparing responses of Questions #1 - #5 by the culture of the participants**

From this analysis, the study seems to conclude that Logo #3 would best communicate the message of energy; a company or product that was environmentally responsible; and a product that was clean, smokeless, and odorless, and would be the choice to identify Nature's Marketing. Logo #2 seems to best communicate transformation and a product that is safe, efficient and effective. Logo #1 seemed to have the weakest communication skills for the specific questions asked.

Table 10 shows how the color combination of brown, blue and green communicated to the participants according to their cultural groups. The Asian group split their responses between environment (sixty percent) and clean (forty percent). The Other group split their responses with environment and life each receiving forty percent and clean twenty percent. Although the study seems to conclude that the color combination of brown, blue and green does communicate environment to both groups, it was interesting that the Asians responded to the color combination as communicating clean, instead of life.



**Table 10. Comparing responses of Question #6 by the culture of the participants**

The color green is viewed as meaning environmental awareness, new beginnings or rebirth, spring, and money in the US and Western Europe. In China, green means exorcism and infidelity, yet symbolizes health, growing energy and balance, while in Japan green means life and high-tech. In North Africa, green means corruption, but in South Africa green means nature. The color blue is associated with good health, cleanliness, boys, and trust in the US, while China associates blue with immorality and wealth. Blue is a positive, happy color in Africa. Brown is the color of earth in the US and is also viewed as a dependable, healthy color. Asia, too, symbolizes brown as earth, but also associates brown with industry.

The results from the study seem to conclude that the color combination of brown, blue and green would symbolize environment, balance, health, healing, trust, wealth, dependable and the earth no matter the country where the logo was used.

The target audience for Nature's Marketing includes race (horse) tracks, breeding and boarding stables, dairies, poultry farms, seed stock facilities, tree services, landfills and recycling (paper and other wood by-products) plants. Age is an important factor in the marketing of a product or service, and the age of Nature's Marketing target audience can range from young business people to seasoned professionals. The three logo designs were evaluated according to the age of the participants in the testing group to detect differences in communication based on age.

Table 11 shows a side-by-side comparison of Questions #1-#5 from the study and how the participants in the testing group (divided by age) responded to each logo. The youngest age group (age 22-25) responded most often to Logo #3; as the logo, which communicated the best for energy; a clean, smokeless and odorless product; and environmentally responsible. This age group was divided evenly between the three logos for

a safe, efficient, and effective product. Logo #2 received twice as many responses for transformation than #3.

The 26-30 year-old age group (the largest participant group in the study) was more divided across the study. Their responses were evenly divided between Logo #1 and #3 for energy. Logo #2 received seventy-five percent of the responses for transformation; fifty percent of the response for a clean, smokeless, and odorless product; and thirty-eight percent for a safe, efficient and effective product. Logo #2 received just slightly more responses than Logo #3 in this age group.

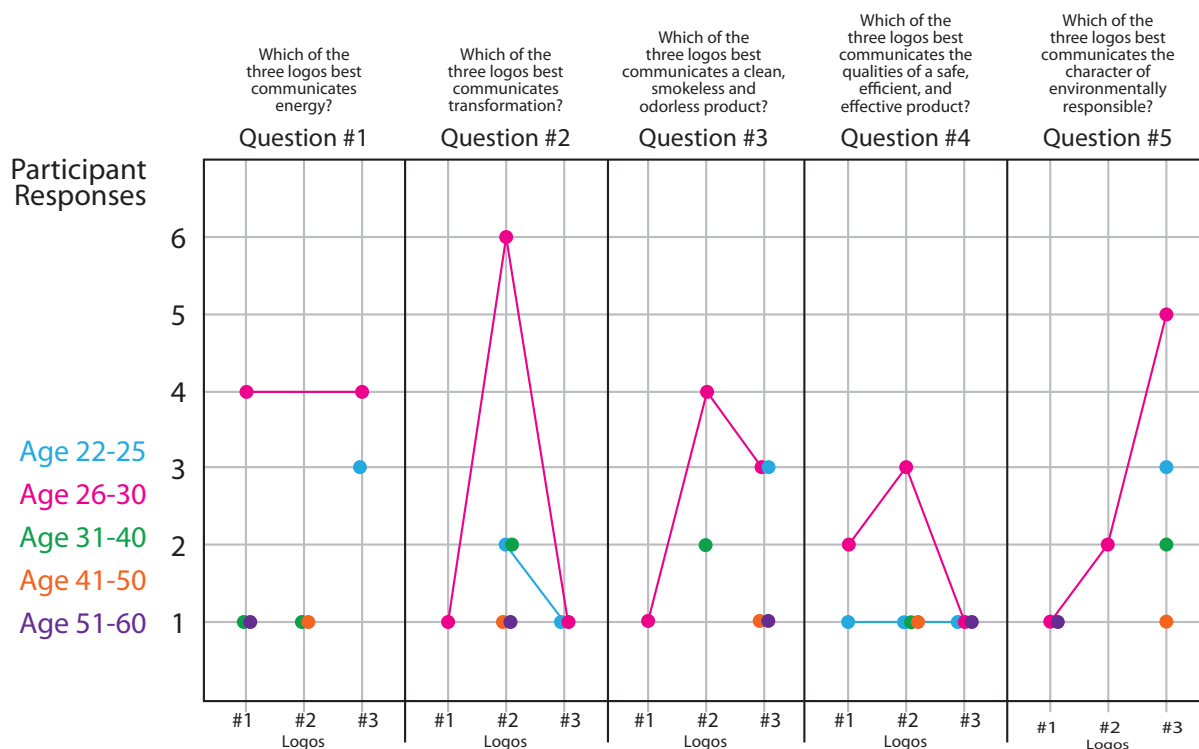
The 31-40 year-old age group most often responded to Logo #2, but chose Logo #3 in response to the question about which logo would best communicate environmentally responsible. There was one no response on the question of which logo communicated the qualities of a clean, smokeless and odorless product from this age group.

The 41-50 year-old age group was divided between Logo #2 and #3, with sixty percent of the responses for #2 and forty percent for #3.

The oldest age group to participate in the study is the 51-60 year-old age group. This group divided their responses between Logo #1 and #3. Logo #2 received a response for transformation only.

With the exception of Logo #2 rating very high for transformation across all age groups, the study seems to conclude that the younger two age groups favor Logo #3. All age groups, except the oldest age group, favors Logo #3 as the best communicator of an environmentally responsible company or product. The oldest age group is evenly divided between Logo #1 and #3, where the two middle-aged groups (31-50) seem to favor Logo #2 in the way it communicates.

## Questions #1-#5

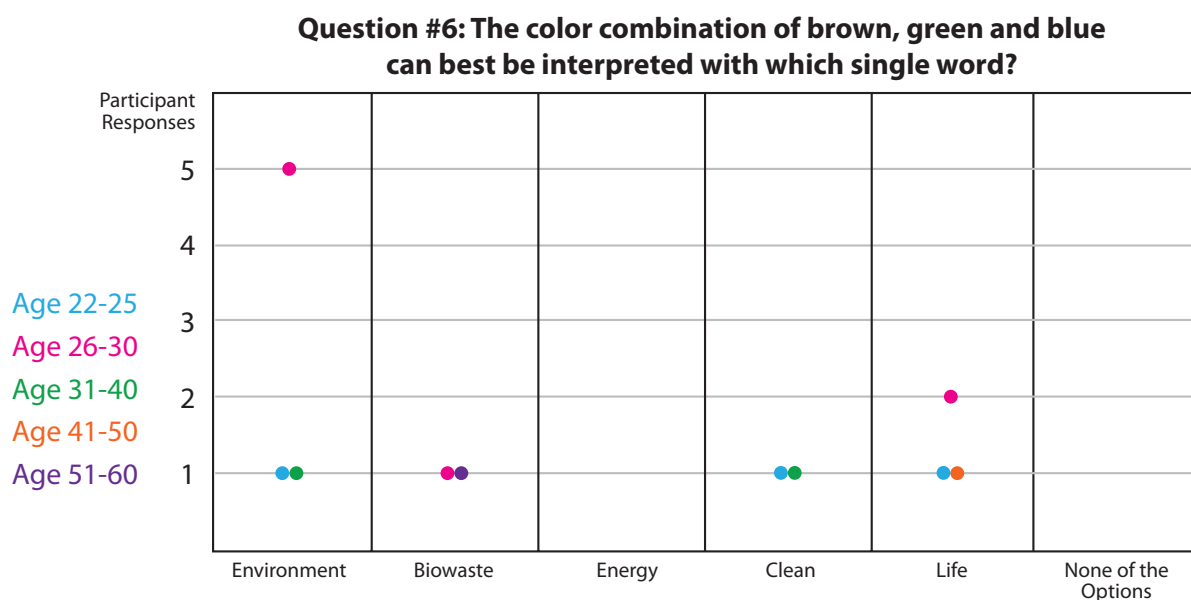


**Table 11. Comparing responses of Questions #1 - #5 by the age of the participants**

Overall, the study seems to suggest that the majority of the population would recognize Logo #3 as representative of an environmentally responsible company. It also responded well with the participants, age 30 and younger. It is interesting to note that the study seems to show the group 31-40 years old as more responsive to Logo #2, except when choosing the logo most environmentally responsible, where Logo #3 was chosen.

Table 12 shows how the different age groups respond to the color combination of brown, blue, and green. The youngest age group (22-25) divides their responses evenly between environment, clean, and life. The next age group (26-30) responded with 63% in agreement with environment, 25% choosing life, and 12.5% choosing biowaste. The middle age group (31-40) was evenly divided between environment and clean. The older age group

(41-50) responded to life, while the oldest age group (51-60) responded to biowaste. The participants who choose environment are in the three youngest age groups, which may reflect their exposure to environmental education in the school system and their exposure to recycling and the renewed concern over the health of the earth. This group of participants may feel more of an urgency to be environmentally responsible, plus they have the extra energy to promote environmental causes.



**Table 12. Comparing responses of Question #6 by the age of the participants**

### 3.5 Synopsis of Logo Testing

The study seems to conclude that Logo #3 would be the best logo to identify Nature's Marketing. Throughout all of the studies, Logo #3 responded well to all of the questions asked, from both men and women, across the range of ages and across cultures. The few

times Logo #3 did not respond as well were when Logo #2 responded very well. Although Logo #3 seemed to have the best response communicating of the message of energy; a company or product that was environmentally responsible; and a product that was clean, smokeless, and odorless. The auger shape from a “head on” view reminded many participants of the blades of a fan, which is why it responded well to the question of communicating a product that was clean, smokeless, and odorless. From participants’ comments, this symbol also had an energetic sense of movement, a kinetic quality, recycling or cleaning, and of transitioning from something dirty (brown, biowaste) to something clean (earth, ground, water, air). The contrast between the organic shape of the symbol with the stability and strength of the name implied care, safety, and dependability of the company.

Logo #2 communicated well in terms of conveying transformation and a product that is safe, efficient and effective. The study results seemed to indicate that the 31-40 year old age group responded better to Logo #2 over the other logos. Comments made by this age group about Logo #2 included: it’s precise and too the point so it is efficient, there is a progression in the lines, it looks corporate, more minimal, and clean in terms of the design.

Logo #1 did not get many responses to the specific questions asked of the participants. Women responded twice as much as men in its communication of energy. Most of the participants’ comments spoke about the energy Logo #1 has from the dynamic angle as well as the three lines that move and intertwine between the strokes of the N, but on the negative side, many stated that they felt Logo #1 represented something that was scientific or that had to do with DNA because of the helix-shaped lines that wrapped around the N.

With all the research on how color communicates across cultures, there was some ambiguity expected by the colors used in the logo, yet there was consistency across cultures.



This study seems to conclude that where individual colors may mean different things to different cultures, the combination of the brown, green and blue communicates the concept of environment well across cultures. This would seem to conclude that no changes in color would need to be made if the identity were to be used in an Asian market.

For the designer, this type of consumer feedback is important and helpful, because when a designer works on a logo, so much research has been gathered that the designer can easily “see” what they are trying to communicate through the logo. A fresh set of eyes with no pre-determined answers can give the designer another viewpoint based on the education and experiences of each individual participant. There are no right or wrong answers, but expressions of the participants’ personal interaction with the logos. The designer can draw from the responses given and the verbal comments made to determine if changes need to be made in Logo #3 so it communicates even better.

Before a final decision is made, the designer needs to go back and analyze the logos against design criteria. How do the logos work in black and white, in reverse, and at a very small size? Are the logos bold, memorable, and immediately recognizable? This question may not be able to be answered before marketing of the new identity has been established. The letterforms in Figure 13 on page 20 are from well-established identity campaigns. Do the logos clearly communicate the company’s objectives? Will the logo be successful across media and scale? Figure 43 shows each logo in color format, black and white format and reverse format.



Logo #1 color



Logo #2 color



Logo #3 color



Logo #1 grey scale



Logo #2 grey scale



Logo #3 grey scale



Logo #1 reversed



Logo #2 reversed



Logo #3 reversed

**Figure 43. Logo #1, Logo #2, and Logo #3 in color, grey scale, and reversed**

Analyzing the three logos based on design criteria seems to conclude that Logo #1 may be too intricate in the detail of the auger, to the point where the three interwoven lines merge together at a small size, more so in grey scale (black/white) and become lost in the reversed format. The interwoven lines are memorable, but did not communicate the company's objectives. Logo #1 would be classified as a metamorphic mark.

Logo #2 loses the readability of the signature in the small format in this relationship. A family of logos would be designed based on the components of the logo chosen to identify Nature's Furnace, which would be used in different instances of application. It is possible, also, for the symbol to stand alone as an identifying mark, so the lack of readability of the signature would not completely rule this logo out. The transformation quality, that responded

so well with this logo, disappears in the reversed format. This issue would have to be addressed in the identity style guide. Logo #2 would be classified as a metamorphic mark.

The readability and communication of Logo #3 holds up under each analysis in Figure 32. The lack of a color change in the symbol in the reversed format does not alter the communication of a kinetic, recycling, renewing movement. The negative space, which is more prominent in the reversed format is pleasing in appearance, with its triangular center and radiating blades of the auger. Logo #3 would be classified as a descriptive mark.

On the basis of design criteria, Logo #3 seems to measure up as the best identity for Nature's Marketing.

David Airey is a graphic designer and author who has worked with identity design for over twenty years. In his book, *Logo Design Love*, Airey writes about the elements of iconic identity design. He lists seven elements that need to be part of an iconic logo. These elements include simplicity, relevance, tradition, distinction, memorable, minimal size, and incorporate one feature. Airey considers simplicity the most important element in an iconic identity design. The simplest solution is often the most effective and most versatile design. A simple logo is easier to recognize, which gives it a greater chance of becoming a logo that is timeless and memorable. Simple logos are more adaptable across a wide range of media. Logo #3, with its three repeating shapes is simplistic in its solution.

Logos do not have to literally reveal what a company does, but the design needs to be relevant and stand out from the competition. Nature's Marketing does not produce augers, but the auger is an important part of the process that creates energy from biowaste. To analyze their current logo, Nature's Marketing does not recycle plastic or newspaper;

theoretically, they are recycling biowaste, yet the recycling arrows do not stand out from their competitors or a number of environmentally friendly companies and products.

Tradition and longevity is the key to a successful identity design, so a logo should last for the duration of the business it represents. A designer should not want to invest their time or a client's money into a design that will look dated in a short amount of time. Colors, too, can be associated with a certain time period.

Distinctive logos will stand out from the competition. It is this element of an iconic design that led to this study. The identities of "green" industries today tend to look like all the other identities of "green" industries, using cliché icons and colors. By focusing on the process used by Nature's Marketing to create energy from biowaste, the auger was the one feature that stood out as being important, unique, and memorable. Working in black and white instead of color is a method designers can use to help in the creation of distinctive marks. The contrast between black and white emphasizes the shape and form of the design. Color can be added after a black and white design is refined. Logo #3 is the only design that communicates effectively in black and white. Grey scale is essential in the communication of the three interwoven lines in Logo #1 and in the communication of the gradation (transformation) in Logo #2.

A quick glance is all the time a logo has to make an impression on most consumers. Airey remarks at the beginning of his book that the simplest mark is the easiest to recognize, which makes a simple design the easiest to leave an impression.

Logos appear on everything from business cards to billboards, zipper pulls to auto graphics. A logo should ideally retain all of its detail at a minimum size of a one-inch square.

According to Airey, a logo that is minimalistic is the most versatile and has the highest prospect of becoming a timeless design.

Airey's last element of iconic identity design is the incorporation of one feature into the design. One feature, instead of two or three or more, will help the design stand out and is easier to be memorable.

Based on Airey's list of elements of iconic identity design, Logo #3 meets most of these elements and would be considered the best possible solution to a new identity design for Nature's Marketing.

### 3.6 Refinement of Logo #3

Using the information gathered from each of the studies, from the verbal remarks made by the study participants, and from the writings of several identity design experts, Logo #3 has been concluded as the best identity to better communicate the message of Nature's Marketing: energy; a product that is clean, smokeless, and odorless; and a company or product that is environmentally responsible. The symbol (Figure 44) has been refined and the signature has been changed to the font in Logos #1 and #2, using the slanted version from #1.



**Figure 44. Final logo for Nature's Marketing**

Logos do not have to literally reveal what a company does, but the design needs to be relevant and stand out from the competition. Nature's Marketing does not produce augers, but the auger is an important part of the process that creates energy from biowaste. The auger is also unique to this process, which makes it the perfect inspiration to focus the identity design around, something that will set this logo apart from other biorenewable logos. In the book, *Logo Design Love*, David Airey lists the elements of iconic identity design as: simplicity, relevance, distinction, memorable, minimal size, & the incorporation of one feature. In a side-by-side comparison, the Final Nature's Marketing Logo is simplistic, relevant to the company, distinctive, retains detail at a minimal size, and incorporates one feature in the symbol (Figure 45). According to Airey these combined elements make the Final Logo more likely to be memorable.

#### Final Nature's Marketing Logo



Simplistic

Relevant

Distinctive

Minimal Size

One Feature

Memorable

#### Current Nature's Marketing Logo



Not Simplistic

Not Distinctive

Detail lost at a Minimal Size

Has more than One Feature

**Figure 45. Comparison of the Final logo for Nature's Marketing to the Current Nature's Marketing Logo**

To analyze their current logo (Figure 45), Nature's Marketing does not recycle plastic or newspaper, which the recycling arrows symbol traditionally represents to most people. Theoretically, they are recycling biowaste, yet the recycling arrows are not distinctive from their competitors or a number of environmentally friendly companies and products. The current logo does not favor well with Airey's elements of iconic identity design. It is neither simplistic nor distinctive. Detail is lost when viewed at a minimal size, and the logo incorporates more than one feature.

Airey remarks at the beginning of his book that the simplest mark is the easiest to recognize. Logos often have only a quick glance to make an impression on most consumers, and Airey believes logos with a simple design are easiest to leave an impression. According to Airey's elements of iconic design, a logo that is minimalistic is the most versatile and has the highest prospect of becoming an iconic design.

### **3.7 Visual Identity System for Nature's Marketing**

The core element of any visual identity system is the logo, which is comprised of a unique graphic symbol, a signature, or a combination of both used to represent a corporation, product or service. A family of logos that gives both diversity and consistency to the visual identity system, which is an established system of communication guidelines for consistent identity use across multiple mediums. The visual identity system includes the logo (symbol and signature), colors, and fonts (Figure 46).



**Figure 46. Visual Identity System for Nature's Marketing**



## CHAPTER 4. CONCLUSIONS AND IMPLICATIONS

This thesis started out by asking two questions:

1. Can a process be established for designers to use when creating visual identities for “green” industries, which are unique and memorable without using cliché images or colors?
2. Can these logos communicate the message of the product, service, or company to the consumer?

The answer to the first question has been answered by many designers, as each have attempted to find the ultimate method to design an iconic logo. There is no process that can guarantee a successful logo, but there are several processes that will give the designer a greater chance of delivering timeless logo designs. Lisa Silver and David Airey have singled out several key elements that, if followed, will create a logo that is more likely to become a logo that can withstand the test of time. Per Mollerup has studied the taxonomic structure of trademarks and gives designers a process to follow in the design of different styles of logos. Mollerup’s work also gives designers a base to study existing logos to help determine which style is more successful in communicating the message for a certain type of company, product or service.

The process needed to create visual identities for “green” industries starts with the designer taking the time to get to know the client, company, product and related industry. This is done through a series of interviews, brainstorming sessions and research of related logos. This study has researched the branding studies of many designers. Marty Neumeier

writes about the five disciplines of branding and determined a process of measuring brands against meaningful criteria. Marc Gobé has studied the cultural, emotional relationships between identity and branding, and how brands have evolved from dictated and impact brands of the past to personal and contact brands of today. Marieke de Mooij writes about the importance of culture and consumer behavior in branding. Jeff Fisher emphasizes that re-branding as a collaboration, between the designer and the top decision makers of a company, while Mono emphasizes branding as a tool in a business evaluation.

All of the above mentioned tools helped to create the foundation for the creation of a new identity for Nature's Marketing. In addition to what has been established by other designers, this study proposes that the process involved in generating the "green" product will present an attribute that is both unique and memorable. By experiencing and understanding the process, the designer will be able to pinpoint the unique feature within that process and use that feature as the focus of the identity design. This unique feature is what will set apart the identity design of one "green" industry from all the rest. For example, in the case of Fulcrum BioEnergy, the unique feature was set apart in the name of the company (fulcrum) through brainstorming sessions. The definition of a fulcrum was used as the foundation of the company's mission statement.

The step-by-step process used to create the identity design for Nature's Marketing included: a brand audit, interviews with the CEO and employees, demonstration and understanding of the biowaste renewable process, brainstorming sessions, research of related logos, experimentation and exploration of the unique aspect (auger) pinpointed in the renewable process, and testing and evaluation of proposed logos, followed by the refinement (Figure 47)

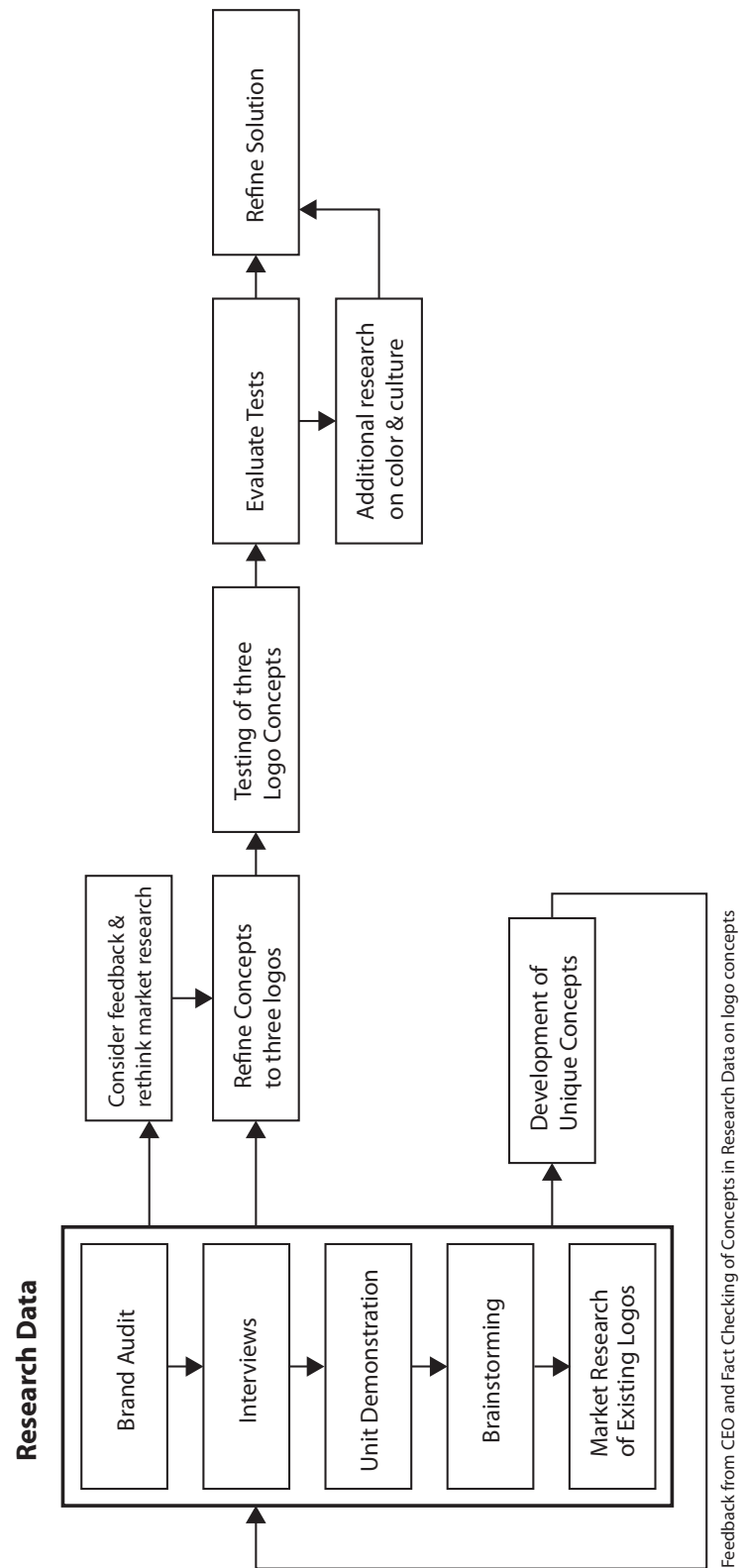


Figure 47. Design process for “green” identity conception and design

In the case of Nature's Marketing, the company name is not unique or inspiring. Several companies with similar names were found to be in similar industries. It was during the demonstration of the Nature's Furnace unit, that the auger was discovered, and through more research and interviews the auger was determined to be a unique feature of the Nature's Marketing units. By focusing on the auger, the designer was able to create unique identities without using cliché images. The auger is relevant to the biowaste renewable process, and relevance is one element of iconic identity design. Watching and understanding a demonstration of a working unit is unique to this design process. Traditionally, many designers stop their research with the branding audit or interviews.

The answer to the second question was answered through research and the testing of the proposed logo designs. Through analysis of current "green" identities, it was found that the logos, which communicated the best, were classified as descriptive and metamorphic according to Mollerup's taxonomic structure of the trademark. Non-figurative marks are commonly used, but may need to be explained to the consumer to make the needed connection. Found marks are arbitrary, but identifiable, yet will need an explanation as to how the mark is connected to the company, product or service.

Color plays a vital role in logo design, and it is important to understand the meaning of colors across cultures. Designers have been creating "green" logos to depict "green" industries to the point where there is no distinction between companies. Where one color can have opposite meanings to two different people, this study found that the combination of brown, green, and blue colors communicated similar messages across cultural lines.

Graphic designers have the power to influence public opinion and brand value. According to Brian Dougherty in his book, *Green Graphic Design*, "green" design is a higher

order of “good” design.<sup>37</sup> It isn’t the color green designers need to use when designing for “green” industry; instead, designers have the responsibility of communicating the ecological and social considerations of sustainability.

Through consumer and target audience focus groups, proposed logos were tested on their communicative ability to deliver the message of Nature’s Marketing to clients. There were only fifteen participants in the research study. Although it would be necessary to have a larger study to be able to calculate meaningful percentages, probable trends can be seen from the results gathered from the study tests.

Designers are not followers; they design to create new visual trends. Through research, interviews, and a design audit, designers will have the goals set for designing an iconic logo. Consumer/target audience feedback and design criteria can help determine the logos with the greatest chance of standing out among the crowd. As stated in the Abstract, logos do more than represent a company, product, or service; they trigger emotions, create desires and forge communities. A logo is just one element of a corporate identity system, but it is arguably one of the most important. What is important for the designer is to find what makes the company, product or service unique.

This study focused on finding a unique identity for a biowaste renewable company that did not use cliché images or the color green as the dominant color of the logo by focusing on the process involved in the creation of the “green” energy. Americans are bombarded with thousands of logos in a given day. Which logos do we pay attention to, which logos do we recognize, and which logos do we pass by without any interaction? The

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<sup>37</sup> Brian Dougherty, *Green Graphic Design* (New York: Allworth Press, 2008), 15.

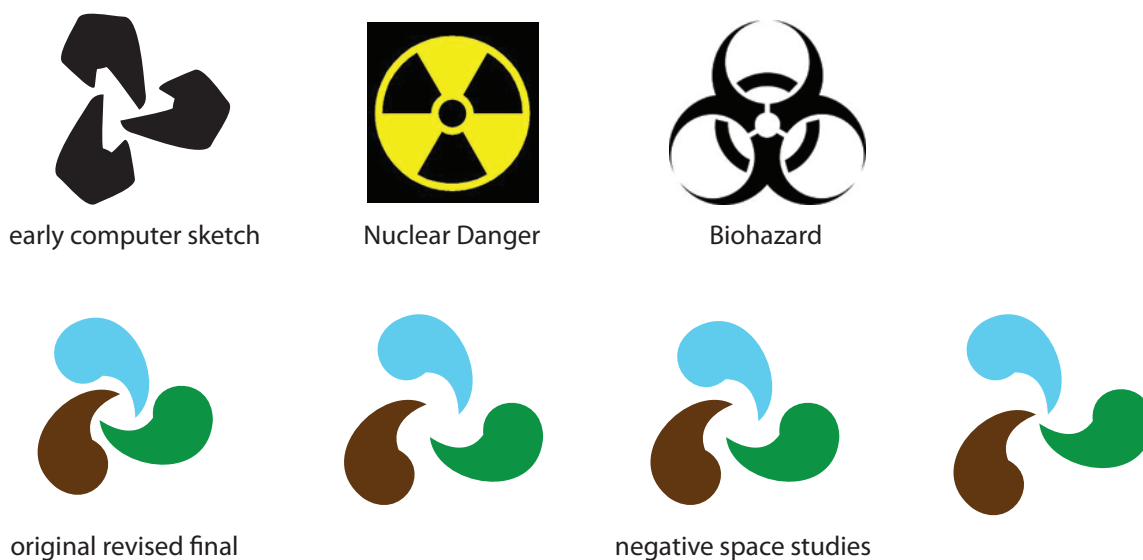
process used in this study to find a way to create a unique identity for a “green” industry can be used to create unique identities for any industry. As designers, we need to continue to push the boundaries to find the uniqueness of a company and use that to accurately reflect the company’s goals and aspirations.

This thesis started out as a creative component for a Master’s degree, so when the decision was made to attain the Master of Fine Arts degree, the majority of the creative aspect of the subject had been finished. After completing the research behind the creative component, more research and resolutions to the creative process should have been done. All additions to the creative process were completed in color. It wasn’t until this author started the design criteria analysis of the logos in grey scale and reversed color did it become apparent that this was a shortcoming in the logo development process. Another shortcoming was in the testing of the three proposed logos. Testing the individual symbols without typography would have been a better way to test the communication of the symbol.

One type of study not included in this thesis that would be interesting as future research is a form study. Motifs are shapes (forms) and this thesis is based on the over-use of certain motifs representing “green” industries, products, or services. Using the final logo, form studies could be completed to see if other forms or abstract shapes that can communicate the same message as the shape used in the final logo. The negative space formed by a logo design is just as important to the communication of a message as the positive space (shape).

As seen in Figure 48, the negative space of an early computer sketch of Logo #3 has a strong negative space. This early sketch was modified and “softened” due to feedback received in the second step of the process where a sense of danger was communicated by the

symbol, similar to the nuclear danger logo and the biohazard logo. Both the nuclear danger logo and the biohazard logo have a strong repetitive negative space. In the second row of Figure 48, the original Logo #3 final revised symbol is shown with three preliminary negative space studies. More negative space studies could be done in a future study.



**Figure 48. Preliminary negative space form studies**

Nature's Marketing is the parent company, created to unite the three similar but different units, which were at one time all marketed under the name, Nature's Furnace. With the identity for the parent company established, the next step will be to create a family of identities for the three units, which will create a distinctive, yet unified look to the Nature's Marketing units.

## APPENDIX

Interview with CEO of Nature's Marketing, John Kimberlin:

- What are the core values (mission statement) of the corporation and product?

*Using biowaste technology, I invented a method that burns all the waste from the inside out, which is different than the other biowaste methods that our competitors use. Our method uses little auxiliary fuels, has no transportation costs, and creates free energy. Biowaste is a positive resource that can benefit agricultural businesses, instead of something that pollutes and fills up landfills. It can better the environment and reduce our consumption of other fuels.*

- What products and/or services are offered?

*Nature's Marketing can produce heated air, heated fluids, steam, or electricity. The potash that is left may be used as fertilizer.*

- Define the qualities of these products and/or services.

*Biowaste has a huge potential as an energy source. The combustion process eliminates all the waste, is ash free, odor free and has a higher energy value than wood; plus the potash bi-product left from the process has virtually no bacteria, parasites or weed seeds, so it can be applied to farm fields worry free. The units are small and cost efficient, so they can be located anywhere, which means transportation costs of moving the biowaste can be greatly reduced or eliminated. About half of the earth's population (mostly third world countries) is virtually dependent on biomass for their cooking, heating, and lighting. Yet, in the United States, biomass contributes only about four percent of the primary energy (nearly*



*as much as nuclear power).*

- Who is the target audience? Where is the target audience located?

*There are numerous businesses that could benefit from a Nature's Marketing unit. Race (horse) tracks and casinos, fairgrounds, stud farms, breeding facilities and boarding stables, dairies, poultry producers, farms, ranches, and seed stock facilities could all benefit by utilizing a Nature's Marketing unit. Tree services with wood waste, landfills, and recycling plants could also benefit by operating a Nature's Marketing unit. These businesses are all over the United States and other countries. We currently have five units in Ireland and hope to increase to other countries.*

- What do they think about your current brand?

*Well, I'll admit there is some confusion with the Nature's Marketing name. We came up with that as a way to tie our three unit names together, so they didn't think we were three separate companies. But, I'm not sold on Nature's Marketing. It could be the name of some natural food store. We're still a pretty small company, and I don't think we really have much name recognition right now, so if we were going to change our name, now would be the time to do it. I'm open to anything you suggest. Our company in Ireland goes by a different name, Origins Green Technologies, Ltd., but that's because we saddled up with another company first. I don't think we'd change that name.*

- What would you like them to think about your brand?

*I want people in the United States to think of biowaste and bioenergy as a positive thing, not something that needs to be removed and discarded, filling up landfills*

*and polluting our water sources. I want people to start looking at biowaste as a positive resource that can benefit the environment and reduce our consumption of other fuels.*

*I'm sure you remember that vicious ice storm in Des Moines a few years ago. It resulted in close to 500 dump trucks a day of dead tree limbs being burned in the open for 63 days. A Nature's Furnace unit could have regenerated this into enough power output that would have produced enough electricity for a community of 10,000 for approximate one year!*

- How will you attract them to your products and/or services?

*The easiest way to convince potential consumers/clients that Nature's Marketing has a unit that can benefit them is to give them a demonstration of how it works. When we have combustion engineers come out to take a look at what we are doing here, they can't believe their eyes! We get a tremendous amount of heat from an extremely high moisture biowaste without the use of fossil fuels in the process with no visible emissions. It's easy to convince clients that they will benefit from one of our units once they've seen one in operation. That's why we routinely have demonstrations here and our distributors try to seek out potential clients.*

- What is the tagline of your company? What message does your tagline send to your prospects?

*Mother Nature's Battery is one of the taglines we use. It's what we first called our first unit until we found out someone else was already using that name. Then we changed the name to Mother Nature's Furnace because what I was focused on at that time was creating heat for all of my out buildings on my farm. The unit was*

*kind of like a furnace using “Mother Nature” as a fuel! We also use “Energy from biowaste” and “Biowaste free energy source” because I want consumers to associate energy with biowaste and that they can get this energy virtually free. It really pays for itself. The first winter I used the unit, I actually sold electricity back to my electric company!*

■ Who are your competitors?

*There are other biowaste renewable companies out there, but none that use the combustion technique that we do. We all have something a little bit different, using different wastes and producing different energies, but a lot of them use fossil fuels in their process. With all the attention of waste-to-energy technology, we’re all kind of competing against each other. Our process regenerates the original fuel source (biomass) and the oxygen that was used during the combustion process. When fossil fuels are combusted, CO<sub>2</sub> is also produced, but cannot be reabsorbed by the fuel source. When biowaste is sent to a landfill or compost station, the parasites and weed seeds in the biowaste gets recycled, where in our process they are virtually eliminated in the combustion process.*

## Renewables in Global Energy Supply: An IEA Fact Sheet

International Energy Agency, January 2007

### Table of Contents:

Part 1: Renewables in Global Energy Supply 2004

Part 2: Scenarios of the Evolution of Renewables to 2030

Part 3: Scenarios and Strategies of Renewables Technology to 2050

Disclaimer: The Renewable Energy Fact Sheet was prepared jointly by the Energy Statistics Division and the Renewable Energy Unit of the International Energy Agency, in collaboration with the Economic Analysis Division and Energy Technology Policy Division of the Agency. This paper reflects the views of the IEA Secretariat and may or may not reflect the views of the individual IEA member countries. For further information on this document, please contact the Renewable Energy Unit at: [renewablesinfo@iea.org](mailto:renewablesinfo@iea.org)

The purpose of the Renewable Energy Fact Sheet is to present the current status of renewable energy markets as well as the IEA scenarios for future development of these technologies.

The International Energy Agency (IEA) is an autonomous body, which was established in November 1974 within the framework of the Organization for Economic Co-operation and Development (OECD) to implement an international energy program. It carries out a comprehensive program of energy co-operation among twenty-six of the OECD's thirty member countries. The basic aims of the IEA are:

- To maintain and improve systems for coping with oil supply disruptions.
- To promote rational energy policies in a global context through co-operative relations with non-member countries, industry and international organizations.

- To operate a permanent information system on the international oil market.
- To improve the world's energy supply and demand structure by developing alternative energy sources and increasing the efficiency of energy use.
- To assist in the integration of environmental and energy policies.

The IEA member countries are: Australia, Austria, Belgium, Canada, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Japan, the Republic of Korea, Luxembourg, the Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States. The European Commission takes part in the work of the IEA.

The Organization for Economic Co-operation and Development (OECD) is a unique forum where the governments of thirty democracies work together to address the economic, social and environmental challenges of globalization. The OECD is also at the forefront of efforts to understand and to help governments respond to new developments and concerns, such as corporate governance, the information economy and the challenges of an ageing population. The Organization provides a setting where governments can compare policy experiences, seek answers to common problems, identify good practice and work to co-ordinate domestic and international policies.

The OECD member countries are: Australia, Austria, Belgium, Canada, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Korea, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, the Slovak Republic, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States. The European Commission takes part in the work of the OECD.

Renewable energies are essential contributors to the energy supply portfolio as they

contribute to world energy supply security, reducing dependency on fossil fuel resources, and provide opportunities for mitigating greenhouse gases. Differences in definition and lack of adequate data complicated the discussion between participants on these key issues. The International Energy Agency believes that this fact sheet can be of use to all to facilitate the debate on the past, current and future place and role of renewables in total energy supply.

Our goal is to present as objectively as possible the main elements of the current renewables energy situation. The definitions and coverage of national statistics vary between countries and organizations. In this fact sheet, the renewables definition includes combustible renewables and waste (CRW), hydro, geothermal, solar, wind, tide and wave energy.

Due to the high share of biomass in total renewables, non-OECD regions like Asia, Africa and Latin America emerge as the main renewables users. The bulk of the consumption occurs in the residential sector for cooking and heating purposes. When looking at hydro and other (or “new”) renewables (solar, wind, etc.), OECD accounts for most of the use with, respectively, 45% and 66% in 2004 (Figures 3 and 4). Renewables are the third largest contributor to global electricity production. They accounted for almost 18% of production in 2004, after coal (40%) and natural gas (close to 20%), but ahead of nuclear (16%), and oil (7%) and nonrenewable waste. Almost 90% of electricity generated from renewables comes from hydropower plants while close to 6% comes from combustible renewables and waste. Geothermal, solar and wind have now reached 4.5% of renewable generation.

Impact of Past Market and Policy Trends on Renewable Energy: The principle constraint in advancing renewable energy over the last few decades has been cost-effectiveness. With the exception of large hydropower, combustible biomass (for heat) and larger geothermal projects, the average costs of renewable energy are generally not

competitive with wholesale electricity and fossil fuel prices. On the other hand, several renewable energy options for specific, small-scale applications can now compete in the marketplace, including hot water from solar collectors and electricity from small hydro and other technologies.

The biggest challenge facing renewable energy technologies is to advance the state-of-the-art to the point where more renewable options can generate energy at costs that are competitive with conventional sources. With worldwide adoption of stricter environmental standards and guidelines for greenhouse gas emissions, it is becoming clear that renewable energy systems will be credited for their inherent advantage in lowering emissions. These environmental benefits will contribute towards making the delivered costs more palatable and are already the driving force behind policy initiatives in many IEA member countries. Nevertheless, achieving substantial technology breakthroughs to improve cost-competitiveness remains a priority.

In many IEA member countries, past policy initiatives to support renewable energy concentrated on research and innovation, market deployment and market-based energy. It is imperative to ensure that market-oriented policies complement technology initiatives. Based on experience to date, the following observations can be made regarding deployment: Significant market growth in renewable technologies results from a combination of policies that address specific barriers and/or complement existing policies. For example, in Japan, photovoltaic (PV) technology was supported by extensive RD&D investments to increase the competitiveness of the technology, through demonstration projects (to increase public awareness and acceptance), through financial incentives (to reduce the purchase price of PV systems) and by requiring utilities to accept, through net metering, excess power generated

by PV systems at the retail price of electricity. In Spain, wind technology is supported by feed-in tariffs, low-interest loans, capital grants, and local support for manufacturing of turbines.

Longevity and predictability of policy support are important to overall market success. In most cases, feed-in tariffs for renewable energy sources have an eight- to twenty-year time frame. The long-term support offered to biomass district heating plants in Austria provides an example. Conversely a ‘stop-and-go’ policy environment does not provide a sound basis to encourage the much-needed private sector involvement.

With the trend towards market liberalization, early support policies for emerging renewable energy technologies must be tailored carefully to insure against the impact of a significant drop in overall energy prices.

**Maturity of Renewable Energy Technologies:** Conceptually, one can define three generations of renewables technologies, reaching back more than 100 years. First-generation technologies emerged from the industrial revolution at the end of the 19th century and include hydropower, biomass combustion, and geothermal power and heat – some of which are still in widespread use.

Second-generation technologies include solar heating and cooling, wind power, modern forms of bioenergy, and solar photovoltaics. These are now entering markets as a result of RD&D investments by IEA member countries since the 1980s. The initial investment was prompted by energy security concerns linked to the oil price crises of that period but the enduring appeal of renewables is due, at least in part, to environmental benefits. Many of the technologies reflect revolutionary advancements in materials.

Third-generation technologies are still under development and include concentrating



solar power, ocean energy, enhanced geothermal systems, and integrated bioenergy systems.

Conclusions: First-generation technologies are most competitive in locations with abundant resource endowment. Their future use depends on the exploration of the remaining resource potential, particularly in developing countries, and on overcoming challenges related to the environment and social acceptance.

Support for both RD&D and market deployment underpins the ongoing development of a second generation of renewable energy technologies. Some of these technologies are commercially available, albeit often with incentives to ensure cost reductions as a result of “market learning”. In principal, market learning provides complementary improvements, as manufacturers refine products and manufacturing processes. Renewable energy technologies exhibit similarities in learning effects or learning ratio (i.e., the per cent decrease in cost for each doubling of installed capacity) with other technologies. Markets for these technologies are strong and growing, but only in a few countries. The challenge is to broaden the market base to ensure continued rapid growth worldwide. Strategic deployment in one country not only reduces technology costs for users there, but also for those in other countries, contributing to overall cost reductions and performance improvement.

Third-generation technologies are not yet widely demonstrated or commercialized. They are on the horizon and may have potential comparable to other renewable energy technologies, but still depend on attracting sufficient attention and RD&D funding. These newest technologies include advanced biomass gasification, bio-refinery technologies; concentrating solar power, hot dry rock geothermal power, and ocean energy. Advances in nanotechnology also play a major role.

As first and second-generation technologies have entered the markets, third-

generation technologies, such as solar concentrating power, enhanced geothermal systems, ocean energy and advanced biomass heavily depend on long term RD&D commitments, where the public sector has a role to play.

Some of the second-generation renewables, such as wind, have high potential and have already realized relatively low production costs. However, issues of seasonal variability present a challenge to their grid integration. In such cases, first-generation technologies, such as hydropower, can serve to level out variable sources. Together with grid improvements and more advanced load and generation management, it is reasonable to assume that renewables will form part of a much more advanced electricity supply structure in the future.

*AIGA Standards of Professional Practice*

What are the Living Principles for Design?

Center for Sustainable Design, October 2009

As one of the defining ideas of the 21st century, sustainability holds tremendous possibilities for the creative community, its business partners and society. And while 87% of recently surveyed AIGA members view sustainability as a top priority, many of them confess they are ill-equipped to apply its principles effectively.

Sustainability is complicated. The decentralized nature of resources, the complexities of the issues and the lack of filtering for how they relate to design appear to be the main barriers for turning motivation into action. Everyone wants to do the right thing, but no one relishes attacking this knowledge hairball.

The Living Principles for Design distill the collective wisdom found in decades of sustainability theories and bring them to life in the first quadruple bottom-line framework for design.

The Living Principles weave together environmental protection, social equity, and economic health — thus building upon commonly accepted, triple bottom-line frameworks. But most significantly, they incorporate cultural vitality because culture is where all aspects of sustainability find their way into the blood stream of society, and culture is where designers have the deepest impact as their creations and choices shape habits and values.

The Living Principles framework is a lens that brings clarity to integrated sustainability and makes it accessible, relevant and ready to put into action. Use it in everything you do. Share it. Enrich it. Teach it. Live it.

Design is a powerful conduit for change. As the messages, artifacts and experiences

we create pass through the hands, minds and hearts of people, we have an opportunity to weave sustainability into the broader fabric of culture and to shift consumption and lifestyle aspirations to a more sustainable basis for living.

In order for individuals, societies, economies and the planet to flourish, we must support environmental responsibility, social equity, economic health and cultural vitality and recognize that they are inextricably linked. The Living Principles for Design form a practical framework that illustrates the confluence of these four streams: the key to sustainable design.

Design can connect people with ideas, motivate behavior change, and shift mindsets. This transformative power can shape new values and provide a compelling understanding of sustainability that ensures its assimilation by a broad array of people, nations and cultures. Economy Design thinking can help invent new economic and business models appropriate for 21st-century realities and set the foundation for a more sustainable world. Design's approach to investigation, analysis, and visualization can be leveraged to create opportunities and value for companies and people across all streams of sustainability. Society Designs and messages that are based on principles of inclusion, equality and empathy provide harmonious and healthy conditions in which all members of society can flourish. Design can visualize acute needs, raise awareness, prompt response, and affect policy to improve quality of life. Design can visualize complex information and make it comprehensible and relevant. It can help invent new systems, products and services to deliver more value for less material and energy used. Design solutions that integrate environmental criteria at every step can overcome natural resource constraints, whether animal, plant, mineral, air or water. Consider intended and unintended ecological consequences of components over the entire lifecycle, including extraction of raw materials from nature, conversion of materials into

artifacts, artifact use / reuse, transportation, disposal, and recycling. Consider the entire supply chain. Seek sustainable suppliers and clean production technologies at every step. Plan to optimize shipping volumes and transportation distances. Eliminate waste.

Maximize use of recycled, recyclable and compostable materials. Plan for use of materials in continuous cycles including disassembly, ease of recovery, take-back programs, upcycling and recycling. Avoid the use of any substances that may cause environmental damage to air quality, water or the earth. Consider appropriate durability to make artifacts last longer or decompose more easily. Design for multiple functions and repairability to encourage reuse. Minimize energy use. Maximize use of clean energy sources such as wind and solar in manufacturing, transportation and product use. Social Equity Create messages, artifacts, services and experiences that respond to the needs of all people, celebrate beauty and promote and enable joyful, healthy living. Consider intended and unintended consequences for individuals and communities from all components over the entire lifecycle, including impacts on human toxicity, water pollution, cancer causing potential, resource depletion and climate change. Understand the ethical supply chain to ensure that products and services are manufactured under safe and fair labor conditions, supporting human rights and basic needs like sufficient pay, healthcare and benefits. Minimize environmental, health and safety risks to employees and communities involved in manufacturing, use, and end-of-life scenarios with safe technologies, facilities and operating procedures.

Understand financial parameters and ensure that solutions meet market criteria for performance and cost. Communicate truthfully and with transparency. Understand and communicate sound business values and short- and long-term benefits of sustainable solutions including efficiency, competitive advantage, profitability, increased sales, brand

equity and employee morale. Consider and encourage business models that incorporate product take-back systems, end-of-life product collection, product upgrading and material recycling. Consider solutions that turn products into lease or service models. Consider equitable systems of corporate ownership and governance, such as co-ops. Create messages, artifacts, services and experiences that provide people with choices that can change attitudes and redefine prosperity. Support and promote the uniqueness of different cultures and recognize that highly functional systems like ecosystems and human communities are resilient because of their diversity.

Consider historical, place-based, social, cultural and economic contexts to make design and messaging culturally relevant and to preserve local cultures. Promote desirable visions that compel people to want to live sustainably.

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